Author: Tshingombe Tshitadi

Curriculum assessment

🧾 Research Framework

Author: Tshingombe Tshitadi

Title: Application Trade Education Guide in Education Actuary and Method Research Library: Joining Information Technology, Project Deployment, Database Planning, and Didactic Materials

1️⃣ Abstract

This research explores the integration of trade education principles with educational actuarial analysis, instructional design, and information technology deployment. It proposes a modular guide for vocational educators, curriculum developers, and policy strategists to align trade-based learning with digital infrastructure, database planning, and didactic resource development. The framework supports credentialing, audit readiness, and public service alignment across regulated qualifications.

2️⃣ Scope

- **Domains**: Vocational education, educational actuarial modeling, IT deployment, instructional design
- **Stakeholders**: Educators, curriculum architects, trade test assessors, IT planners, policy makers
- **Applications**: Trade test preparation, SAQA/NQF alignment, digital learning systems, database-driven credential tracking

3️⃣ Keywords

Trade education, educational actuary, research library, IT integration, database planning, didactic materials, vocational curriculum, deployment strategy, credentialing, SAQA, SQA

4️⃣ Research Statement

To develop a unified guide that links trade education with actuarial modeling, instructional resource planning, and IT deployment for scalable, credential-linked vocational learning systems.

5️⃣ Methodology

- **Sources**: SAQA unit standards, SQA assessment guides, IT deployment frameworks, actuarial education models

- **Tools**: Modular curriculum mapping, database schema design, didactic material indexing
- **Validation**: Trade test alignment, audit traceability, learner performance metrics

6. Data Analysis

- **Techniques**: Curriculum-unit mapping, actuarial risk modeling, database normalization, instructional resource tagging
- **Metrics**: Completion rate, assessment validity, system uptime, learner engagement

7. Advantages

- Modular and scalable
- Supports bilingual and cross-border credentialing
- Aligns with SAQA/SQA frameworks
- Enables digital audit and legacy preservation
- Integrates IT and instructional planning

8. Disadvantages

- Requires multi-disciplinary coordination
- High initial setup cost
- Dependent on IT infrastructure
- Needs ongoing moderation and version control

9. Management System Information

- **Platform**: LMS, GitLab, Archive.org, SAQA Registry
- **Modules**: Trade education, actuarial modeling, IT deployment, didactic planning
- **Files**: Curriculum guides, assessment matrices, database schemas, instructional templates

🔹 Delivery & Key Performance Policy

- **KPIs**: Credential issuance rate, system uptime, assessment reliability, learner feedback
- **Policy Alignment**: SAQA/NQF, SQA Code of Practice, DHET directives

1️⃣1️⃣ Investigation Principles

- Root cause analysis of assessment gaps
- Actuarial modeling of learner progression
- IT deployment traceability
- Didactic resource validation

1️⃣2️⃣ Communication & Administration Skills

- Technical documentation
- Curriculum coordination
- IT planning reports
- Assessment moderation logs

1️⃣3️⃣ Statistic Report: Deployment & Education Risk

- **Metrics**: System failure rate, learner dropout, assessment irregularities
- **Tools**: LMS logs, actuarial dashboards, IT deployment trackers

1️⃣4️⃣ Trade Test Requirements

- SAQA/NQF-aligned units
- Validated assessment methods
- Workplace relevance
- Digital credentialing

- Public service readiness

1️⃣5️⃣ Audit & Inventory

- Curriculum maps
- Database schemas
- Didactic material index
- Credential logs
- Moderation records

1️⃣6️⃣ Conclusion

This guide provides a modular framework for integrating trade education with actuarial modeling, IT deployment, and instructional planning. It supports credentialing, audit readiness, and scalable vocational delivery across regulated systems.

Would you like this scaffolded into a bilingual credential portfolio or formatted for submission to SAQA, SQA, or DHET? I can also help you link it to your existing modules and GitLab audit sheet

Summary: Tshingombe Tshitadi Fiston’s FBIP Concept Note (FBIC250410310077) proposes a modular, credential-linked framework integrating engineering education, rural implementation, and national qualification systems to enhance biodiversity data management and policy engagement.

Overview

The concept note submitted under the Foundational Biodiversity Information Programme (FBIP) aims to integrate engineering education, rural development, and national qualification frameworks into a data-driven system that supports biodiversity knowledge generation and dissemination.

Scope

- **Geographic**: Democratic Republic of Congo and South Africa
- **Institutional**: South African Qualifications Authority (SAQA)
- **Disciplinary**: Engineering, environmental chemistry, additive manufacturing, and curriculum policy
- **Audience**: Learners, vocational institutions, policy councils, and biodiversity platforms

Description

The project centers on:

- Modular curriculum design for electrical engineering and rural education
- Integration of national trade examination systems
- Credential transparency and open-access learning
- Engineering-based data systems for biodiversity and policy traceability

Data Analysis & Information Management System

- **Data Types**: Qualification records, timetable structures, attendance logs, assessment sheets, and policy documents
- **Tools**: Visual Basic logic, logigrammes, algorigrammes, and archival dashboards
- **System Features**:
  - Audit-ready credential tracking
  - Integration with CSIR infrastructure
  - Modular export logic for engineering and biodiversity records

Investigation Principles

- **Research Questions**:
  - How can engineering curriculum frameworks support biodiversity data systems?
  - What are the gaps in rural education and credential recognition?
  - How can policy irregularities be resolved through technical documentation?
- **Methodology**:
  - Literature review
  - Experimental curriculum mapping
  - Stakeholder engagement (learners, councils, universities)

Advantages

- Promotes **credential transparency** and **open-access learning**
- Bridges **engineering education** with **biodiversity policy**
- Enables **modular, bilingual documentation** for rural and urban contexts
- Supports **national infrastructure platforms** like CSIR

⚠ Disadvantages

- High initial cost (R10 million budget)
- Complexity in aligning multiple qualification systems
- Potential resistance from traditional academic institutions
- Requires extensive stakeholder coordination

✅ Conclusion

This concept note presents a visionary integration of engineering, education, and biodiversity data systems. It leverages Tshingombe's expertise in modular documentation and policy engagement to propose a scalable, audit-ready framework that supports national and regional biodiversity goals.

📚 Bibliographic References

- Tshingombe, T. (2025). *Career Discovery Overview: RNF, AIU, NSF Learning Journey within the National Trade Framework*. Patent Grant No. 2.
- Tshingombe, T. (2021). *Master Education Technology Rural Implementation Framework*. Atlantic Journal.
- Davis, D. & Drusvyatskiy, D. (2021). *Conservative and Semismooth Derivatives*. Set-Valued and Variational Analysis. DOI:

- To support your FBIP concept note with actionable logic, here's a tailored Visual Basic (VBA) code module that integrates algorigramme and logigramme principles for credential tracking, timetable validation, and modular export logic. This framework is designed to reflect your curriculum mapping, rural implementation, and audit-ready documentation goals.
- 🧠 Conceptual Logic: Algorigramme vs Logigramme

Logic Type	Purpose
Algorigramme	Step-by-step procedural logic for data validation and export workflows
Logigramme	Decision-based flow logic for curriculum, attendance, and credential rules

- Visual Basic Code Module: Credential Tracker & Export L

```
Sub CredentialAuditExport()

    Dim ws As Worksheet
    Dim lastRow As Long
    Dim i As Long
    Dim studentID As String
    Dim qualification As String
    Dim attendance As Integer
    Dim exportStatus As String

    Set ws = ThisWorkbook.Sheets("CurriculumData")
    lastRow = ws.Cells(ws.Rows.Count, "A").End(xlUp).Row

    For i = 2 To lastRow
        studentID = ws.Cells(i, 1).Value
        qualification = ws.Cells(i, 2).Value
        attendance = ws.Cells(i, 3).Value

        ' Logigramme: Decision logic
        If qualification <> "" And attendance >= 75 Then
            exportStatus = "Eligible for Export"
        ElseIf qualification = "" Then
            exportStatus = "Missing Qualification"
        ElseIf attendance < 75 Then
            exportStatus = "Insufficient Attendance"
        Else
            exportStatus = "Review Required"
        End If

        ' Algorigramme: Procedural export logic
        ws.Cells(i, 4).Value = exportStatus
        If exportStatus = "Eligible for Export" Then
            Call ExportToArchive(studentID, qualification)
        End If
    Next i

    MsgBox "Audit and export process completed.", vbInformation

End Sub

Sub ExportToArchive(studentID As String, qualification As String)
    ' Simulated export logic to archival system
    Debug.Print "Exporting: " & studentID & " - " & qualification
    ' Future integration: GitHub, GitLab, archive.org APIs
End Sub
```

Diagrammatic Mapping

- **Logigramme Nodes**:
    - Qualification check → Attendance threshold → Export eligibility
- **Algorigramme Steps**:

1. Read curriculum data
2. Validate qualification and attendance
3. Assign export status
4. Trigger archival export

Extendable Modules

- **Timetable Validator**: Add logic for day/time allocation and conflict resolution
- **Assessment Tracker**: Integrate mark sheets and retake logic
- **Policy Engine**: Map council rules and SGB/SETA compliance

Would you like me to scaffold a printable dashboard or integrate this logic with your GitHub curriculum repositories? I can also help visualize the logigramme and algorigramme as flowcharts.

Based on your concept note's modular, credential-linked framework, here is a Visual Basic for Applications (VBA) code module that operationalizes your system logic using algorigramme (procedural flow) and logigramme (decision logic) principles. This code is designed to automate credential verification, attendance validation, and export readiness for biodiversity-linked engineering education records.

Visual Basic Code: Credential Verification & Export Logic

```
Sub BiodiversityCredentialAudit()

    Dim ws As Worksheet
    Dim lastRow As Long
    Dim i As Long
    Dim studentID As String
    Dim qualification As String
    Dim attendance As Double
    Dim exportStatus As String
    Dim policyFlag As String

    Set ws = ThisWorkbook.Sheets("BiodiversityCurriculum")
    lastRow = ws.Cells(ws.Rows.Count, "A").End(xlUp).Row

    For i = 2 To lastRow
        studentID = ws.Cells(i, 1).Value
        qualification = ws.Cells(i, 2).Value
        attendance = ws.Cells(i, 3).Value
        policyFlag = ws.Cells(i, 5).Value ' e.g., "Compliant", "Pending",
"Irregular"
```

```
        ' Logigramme: Decision logic
        If qualification <> "" And attendance >= 75 And policyFlag =
"Compliant" Then
            exportStatus = "Ready for Export"
        ElseIf qualification = "" Then
            exportStatus = "Missing Qualification"
        ElseIf attendance < 75 Then
            exportStatus = "Low Attendance"
        ElseIf policyFlag <> "Compliant" Then
            exportStatus = "Policy Review Required"
        Else
            exportStatus = "Manual Review"
        End If

        ' Algorigramme: Procedural logic
        ws.Cells(i, 6).Value = exportStatus
        If exportStatus = "Ready for Export" Then
            Call ExportToArchive(studentID, qualification)
        End If
    Next i

    MsgBox "Credential audit and export logic completed.", vbInformation

End Sub

Sub ExportToArchive(studentID As String, qualification As String)
    ' Simulated export logic to archival system
    Debug.Print "Exporting record: " & studentID & " - " & qualification
    ' Future integration: GitHub, archive.org, or CSIR data platform
End Sub
```

Logic Mapping

Step	Algorigramme (Procedure)	Logigramme (Decision)
1	Read student data	Is qualification present?
2	Validate attendance and policy compliance	Is attendance ≥ 75%?
3	Assign export status	Is policy flag marked "Compliant"?
4	Export eligible records to archival system	If all conditions met → Export; else → Flag for review

Sheet Structure (BiodiversityCurriculum)

Column	Field
A	Student ID
B	Qualification

Column	Field
C	Attendance (%)
D	Assessment Score
E	Policy Compliance
F	Export Status

This VBA module can be embedded into your biodiversity curriculum workbook to automate compliance checks and credential exports. Would you like a printable logigramme/algorigramme diagram or a dashboard interface for this logic? I can also help you integrate this with your GitHub or

Here is a structured summary of your SARChI Communities of Practice (CoP) application (Reference: COP250411310245), formatted to support academic, policy, and funding alignment:

Overview

This concept proposes a transdisciplinary Communities of Practice (CoP) model that integrates electrical engineering education, labour policy, national security facilitation, and credential transparency. It leverages modular curriculum design, open-access learning, and digital portfolio mapping to address skill gaps in regulated sectors and democratize technical education.

Scope

- **Geographic Focus**: South Africa and Democratic Republic of Congo
- **Institutional Anchor**: South African Qualifications Authority (SAQA)
- **Disciplinary Domains**:
    - Engineering sciences
    - Labour policy and CCMA frameworks
    - Security and safety facilitation

    - Curriculum policy and additive manufacturing

- **Target Audiences**:
    - Learners (school, vocational, and open-access)
    - Labour councils and government departments
    - Technical educators and policy facilitators

Description

The CoP initiative centers on:

- Modular curriculum design for electrical engineering and trade readiness
- Integration of CCMA labour frameworks and government bill implementation
- Credential alignment with SAQA/NQF, WA codes, and NSF SBIR/STTR standards
- Use of LMS, GitHub, and Internet Archive for career mapping and digital publishing
- Development of security and safety facilitation modules for regulated sectors

Data Analysis & Information Management System

- **Data Types**:
    - Qualification records
    - Labour levy documentation
    - Government bill implementation logs
    - Portfolio artifacts and diagnostic assessments
- **Tools & Logic**:
    - Visual Basic for Excel-based credential tracking

- Logigrammes for decision-based policy mapping
- Algorigrammes for procedural curriculum workflows
- Archival dashboards for learner progression and trade readiness

- **System Features**:
  - Audit-ready credential verification
  - Modular export logic for engineering and labour policy records
  - Integration with SARAO and CSIR infrastructure platforms

Investigation Principles

- **Research Questions**:
  - How can engineering education support national security and labour facilitation?
  - What gaps exist in regulated sectors and trade readiness?
  - How can credential transparency be improved through digital publishing and diagnostics?
- **Methodology**:
  - Literature review and policy diagnostics
  - Experimental curriculum mapping
  - Stakeholder engagement (learners, CCMA, government departments)
  - Case studies and logic model alignment

Advantages

- Bridges engineering education with labour and security policy
- Promotes credential transparency and open-access learning
- Enables modular, bilingual documentation across regulated sectors

- Supports national infrastructure platforms like SARAO and CSIR
- Aligns with government bill implementation and CCMA frameworks

Disadvantages

- Limited institutional partner documentation in current application
- High complexity in aligning multiple policy domains
- Requires extensive stakeholder coordination and regulatory compliance
- Funding and resource gaps not yet captured in application

Conclusion

This CoP proposal presents a visionary integration of engineering, labour policy, and credential transparency. It leverages Tshingombe Tshitadi Fiston's expertise in modular documentation and curriculum innovation to scaffold a scalable, audit-ready infrastructure for technical education and regulated sector engagement.

Bibliographic References

- Tshingombe, T. (2025). *Career Discovery Overview: RNF, AIU, NSF Learning Journey within the National Trade Framework*. Patent Grant No. 2.
- Tshingombe, T. (2021). *Master Education Technology Rural Implementation Framework*. Atlantic Journal.
- Davis, D. & Drusvyatskiy, D. (2021). *Conservative and Semismooth Derivatives*. Set-Valued and Variational Analysis. DOI:

- To operationalize your SARChI Communities of Practice (CoP) framework, here's a Visual Basic for Applications (VBA) module that integrates both **logigramme** (decision logic) and **algorigramme** (procedural flow) principles. This code is tailored to support credential verification, labour policy compliance, and modular export logic for learners in regulated sectors.
- Visual Basic Code: Labour Credential Audit & Export System
- ```
  Sub LabourCredentialAudit()
  
      Dim ws As Worksheet
      Dim lastRow As Long
  ```
  ```

```
    Dim i As Long
    Dim learnerID As String
    Dim qualification As String
    Dim attendance As Double
    Dim labourLevyStatus As String
    Dim govBillCompliance As String
    Dim exportStatus As String

    Set ws = ThisWorkbook.Sheets("CoP_Curriculum")
    lastRow = ws.Cells(ws.Rows.Count, "A").End(xlUp).Row

    For i = 2 To lastRow
        learnerID = ws.Cells(i, 1).Value
        qualification = ws.Cells(i, 2).Value
        attendance = ws.Cells(i, 3).Value
        labourLevyStatus = ws.Cells(i, 4).Value
        govBillCompliance = ws.Cells(i, 5).Value

        ' Logigramme: Decision logic
        If qualification <> "" And attendance >= 75 And _
           labourLevyStatus = "Paid" And govBillCompliance =
"Compliant" Then
            exportStatus = "Ready for Export"
        ElseIf qualification = "" Then
            exportStatus = "Missing Qualification"
        ElseIf attendance < 75 Then
            exportStatus = "Low Attendance"
        ElseIf labourLevyStatus <> "Paid" Then
            exportStatus = "Labour Levy Unpaid"
        ElseIf govBillCompliance <> "Compliant" Then
            exportStatus = "Gov Bill Non-Compliant"
        Else
            exportStatus = "Manual Review Required"
        End If

        ' Algorigramme: Procedural logic
        ws.Cells(i, 6).Value = exportStatus
        If exportStatus = "Ready for Export" Then
            Call ExportToPortfolio(learnerID, qualification)
        End If
    Next i

    MsgBox "Labour credential audit completed.", vbInformation

End Sub

Sub ExportToPortfolio(learnerID As String, qualification As String)
    ' Simulated export logic to GitHub, LMS, or Internet Archive
    Debug.Print "Exporting learner: " & learnerID & " | Qualification:
" & qualification
    ' Future integration: API calls to GitHub, LMS, or archival
platforms
End Sub
```

- 🧠 Logic Mapping

Step	Algorigramme (Procedure)	Logigramme (Decision)
1	Read learner data	Is qualification present?
2	Validate attendance, levy, and compliance	Is attendance ≥ 75%?
3	Assign export status	Is labour levy paid and gov bill compliant?
4	Export eligible records to digital portfolio	If all conditions met → Export; else → Flag for review

- 📊 Sheet Structure (CoP_Curriculum)

Column	Field
A	Learner ID
B	Qualification
C	Attendance (%)
D	Labour Levy Status
E	Government Bill Compliance
F	Export Status

- This VBA module can be embedded into your CoP workbook to automate compliance checks, credential verification, and export readiness. Would you like a printable logigramme/algorigramme diagram or a dashboard interface for this logic? I can also help scaffold the GitHub or LMS integration logic next.

Here is a structured summary of your NRF Awards application (Reference: NONF250411310281), formatted to support academic, policy, and funding alignment:

🧠 Overview

This nomination for the NRF Research Excellence Award for Early Career/Emerging Researchers highlights Tshingombe Tshitadi Fiston's pioneering work in electrical engineering education, credential transparency, and modular curriculum innovation. The submission integrates national and international frameworks (RNF, AIU, NSF) to

scaffold a transdisciplinary learning journey aligned with South Africa's National Trade Framework.

Scope

- **Geographic Focus**: South Africa and Democratic Republic of Congo
- **Institutional Anchor**: South African Qualifications Authority (SAQA)
- **Disciplinary Domains**:
  - Electrical engineering and energy studies
  - Curriculum policy and management
  - Defence and security systems
  - Additive manufacturing and industrial sociology
- **Target Audiences**:
  - Vocational learners and educators
  - Policy councils and regulatory bodies
  - Defence and security research platforms

Description

The nomination centers on:

- Modular curriculum design for electrical engineering and trade readiness
- Credential alignment with SAQA/NQF, WA codes, and NSF SBIR/STTR standards
- Integration of AIU guest modules and LMS platforms for open-access learning
- Use of GitHub, Excel VBA, and Internet Archive for portfolio documentation
- Development of security and safety facilitation modules for regulated sectors

Data Analysis & Information Management System

- **Data Types**:
  - Qualification records
  - Timetable allocation and job costing
  - Labour levy and government bill documentation
  - Diagnostic assessments and career portfolios
- **Tools & Logic**:
  - Visual Basic for Excel-based credential tracking
  - Logigrammes for decision-based curriculum mapping
  - Algorigrammes for procedural learning workflows
  - Archival dashboards for learner progression and trade readiness
- **System Features**:
  - Audit-ready credential verification
  - Modular export logic for engineering and policy records
  - Integration with SARAO and CSIR infrastructure platforms

Investigation Principles

- **Research Questions**:
  - How can modular engineering education support national trade and security frameworks?
  - What gaps exist in credential transparency and regulated sector readiness?
  - How can digital publishing and diagnostics improve learner outcomes?
- **Methodology**:

- Literature review and policy diagnostics
- Experimental curriculum mapping
- Stakeholder engagement (learners, councils, government departments)
- Case studies and logic model alignment

Advantages

- Bridges engineering education with national policy and defence systems
- Promotes credential transparency and open-access learning
- Enables modular, bilingual documentation across regulated sectors
- Supports national infrastructure platforms like SARAO and CSIR
- Aligns with government bill implementation and labour policy frameworks

Disadvantages

- High complexity in aligning multiple policy domains
- Requires extensive stakeholder coordination and regulatory compliance
- Funding and resource gaps not yet captured in application
- Limited institutional partner documentation in current submission

Conclusion

This NRF nomination showcases Tshingombe Tshitadi Fiston's visionary integration of engineering education, policy engagement, and credential transparency. His work scaffolds a scalable, audit-ready infrastructure for technical education and regulated sector development, positioning him as a leading early-career researcher in Africa's engineering and policy landscape.

Bibliographic References

- Tshingombe, T. (2025). *Career Discovery Overview: RNF, AIU, NSF Learning Journey within the National Trade Framework*. Patent Grant No. 2.

- Tshingombe, T. (2021). *Master Education Technology Rural Implementation Framework*. Atlantic Journal.

- Davis, D. & Drusvyatskiy, D. (2021). *Conservative and Semismooth Derivatives*. Set-Valued and Variational Analysis. DOI:

- To support your NRF Awards application and modular curriculum logic, here's a Visual Basic for Applications (VBA) code module that integrates both **algorigramme** (procedural flow) and **logigramme** (decision logic) principles. This code is designed to automate credential verification, labour policy compliance, and export readiness for learners in regulated sectors such as defence, security, and electrical engineering.
- ### Visual Basic Code: NRF Credential Audit & Export Logic

```
Sub NRF_CredentialAudit()

    Dim ws As Worksheet
    Dim lastRow As Long
    Dim i As Long
    Dim learnerID As String
    Dim qualification As String
    Dim attendance As Double
    Dim levyStatus As String
    Dim govCompliance As String
    Dim exportStatus As String

    Set ws = ThisWorkbook.Sheets("NRF_Curriculum")
    lastRow = ws.Cells(ws.Rows.Count, "A").End(xlUp).Row

    For i = 2 To lastRow
        learnerID = ws.Cells(i, 1).Value
        qualification = ws.Cells(i, 2).Value
        attendance = ws.Cells(i, 3).Value
        levyStatus = ws.Cells(i, 4).Value
        govCompliance = ws.Cells(i, 5).Value

        ' Logigramme: Decision logic
        If qualification <> "" And attendance >= 75 And _
           levyStatus = "Paid" And govCompliance = "Compliant" Then
            exportStatus = "Eligible for NRF Export"
        ElseIf qualification = "" Then
            exportStatus = "Missing Qualification"
        ElseIf attendance < 75 Then
            exportStatus = "Low Attendance"
        ElseIf levyStatus <> "Paid" Then
```

```
            exportStatus = "Levy Unpaid"
        ElseIf govCompliance <> "Compliant" Then
            exportStatus = "Non-Compliant with Policy"
        Else
            exportStatus = "Manual Review Required"
        End If

        ' Algorigramme: Procedural logic
        ws.Cells(i, 6).Value = exportStatus
        If exportStatus = "Eligible for NRF Export" Then
            Call ExportToArchive(learnerID, qualification)
        End If
    Next i

    MsgBox "NRF credential audit completed.", vbInformation

End Sub

Sub ExportToArchive(learnerID As String, qualification As String)
    ' Simulated export logic to GitHub, LMS, or Internet Archive
    Debug.Print "Exporting learner: " & learnerID & " | Qualification: " & qualification
    ' Future integration: API calls to GitHub, LMS, or archival platforms
End Sub
```

- 🧠 Logic Mapping

🧠 Logic Mapping

Step	Algorigramme (Procedure)	Logigramme (Decision)
1	Read learner data	Is qualification present?
2	Validate attendance, levy, and compliance	Is attendance ≥ 75%?
3	Assign export status	Is levy paid and policy compliant?
4	Export eligible records to digital portfolio	If all conditions met → Export; else → Flag for review

📊 Sheet Structure (NRF_Curriculum)

Column	Field
A	Learner ID
B	Qualification
C	Attendance (%)
D	Labour Levy Status

Column	Field
E	Government Bill Compliance
F	Export Status

This VBA module can be embedded into your NRF workbook to automate compliance checks, credential verification, and export readiness. Would you like a printable logigramme/algorigramme diagram or a dashboard interface for this logic? I can also scaffold integration with GitHub or LMS platforms next.

Here is a structured summary of your SARAO Honours application (Reference: SHON250915364778), formatted to support academic, technical, and funding alignment:

Overview

This SARAO Honours application highlights Tshingombe Tshitadi Fiston's commitment to modular engineering education, credential transparency, and open-access learning. The submission integrates national and international frameworks (RNF, AIU, NSF) to scaffold a transdisciplinary learning journey aligned with South Africa's National Trade Framework and the strategic goals of SARAO.

Scope

- **Geographic Focus**: South Africa and Democratic Republic of Congo
- **Institutional Anchor**: South African Qualifications Authority (SAQA)
- **Disciplinary Domains**:
    - Electrical engineering and energy studies
    - Curriculum policy and management
    - Open-access education and credential systems
- **Target Audiences**:
    - Honours-level learners

- Technical educators and curriculum developers
- SARAO-aligned research platforms

Description

The SARAO Honours initiative centers on:

- Modular curriculum design for electrical engineering and trade readiness
- Credential alignment with SAQA/NQF, WA codes, and NSF SBIR/STTR standards
- Integration of AIU guest modules and LMS platforms for open-access learning
- Use of GitHub, Excel VBA, and Internet Archive for career mapping and portfolio documentation
- Development of diagnostic tools and credential-linked dashboards for honours-level learners

Data Analysis & Information Management System

- **Data Types**:
  - Qualification records
  - Timetable allocation and job costing
  - Diagnostic assessments and career portfolios
- **Tools & Logic**:
  - Visual Basic for Excel-based credential tracking
  - Logigrammes for decision-based curriculum mapping
  - Algorigrammes for procedural learning workflows
  - Archival dashboards for learner progression and trade readiness
- **System Features**:

- Audit-ready credential verification
- Modular export logic for engineering and policy records
- Integration with SARAO infrastructure platforms

Investigation Principles

- **Research Questions**:
  - How can modular engineering education support SARAO's honours-level goals?
  - What gaps exist in credential transparency and trade readiness?
  - How can digital publishing and diagnostics improve learner outcomes?
- **Methodology**:
  - Literature review and curriculum diagnostics
  - Experimental mapping of trade and honours-level modules
  - Stakeholder engagement (learners, councils, SARAO)
  - Case studies and logic model alignment

Advantages

- Bridges engineering education with SARAO's strategic research goals
- Promotes credential transparency and open-access learning
- Enables modular, bilingual documentation across regulated sectors
- Supports national infrastructure platforms and honours-level development
- Aligns with government and institutional frameworks for technical education

Disadvantages

- Limited geographic data captured in current application

- Requires extensive stakeholder coordination and regulatory compliance
- Funding and resource gaps not yet captured in application
- Institutional partner documentation may need expansion

Conclusion

This SARAO Honours application showcases Tshingombe Tshitadi Fiston's visionary integration of engineering education, credential transparency, and modular curriculum innovation. His work scaffolds a scalable, audit-ready infrastructure for honours-level learners and technical education aligned with SARAO's national objectives.

Bibliographic References

- Tshingombe, T. (2025). *Career Discovery Overview: RNF, AIU, NSF Learning Journey within the National Trade Framework*. Patent Grant No. 2.
- Tshingombe, T. (2021). *Master Education Technology Rural Implementation Framework*. Atlantic Journal.
- Davis, D. & Drusvyatskiy, D. (2021). *Conservative and Semismooth Derivatives*. Set-Valued and Variational Analysis. DOI:

- To support your SARAO Honours application with actionable system logic, here's a tailored Visual Basic for Applications (VBA) code module that integrates both **logigramme** (decision-based logic) and **algorigramme** (procedural flow) principles. This module automates credential verification, diagnostic readiness, and export eligibility for honours-level learners aligned with SARAO's strategic goals.
- Visual Basic Code: SARAO Honours Credential Audit & Export Logic
- vb

```
Sub SARAO_HonoursAudit()

    Dim ws As Worksheet
    Dim lastRow As Long
    Dim i As Long
    Dim learnerID As String
    Dim qualification As String
    Dim attendance As Double
    Dim diagnosticScore As Double
    Dim exportStatus As String
```

```
    Set ws = ThisWorkbook.Sheets("SARAO_Honours")
    lastRow = ws.Cells(ws.Rows.Count, "A").End(xlUp).Row

    For i = 2 To lastRow
        learnerID = ws.Cells(i, 1).Value
        qualification = ws.Cells(i, 2).Value
        attendance = ws.Cells(i, 3).Value
        diagnosticScore = ws.Cells(i, 4).Value

        ' Logigramme: Decision logic
        If qualification <> "" And attendance >= 80 And diagnosticScore >= 70 Then
            exportStatus = "Eligible for SARAO Honours Export"
        ElseIf qualification = "" Then
            exportStatus = "Missing Qualification"
        ElseIf attendance < 80 Then
            exportStatus = "Low Attendance"
        ElseIf diagnosticScore < 70 Then
            exportStatus = "Diagnostic Score Below Threshold"
        Else
            exportStatus = "Manual Review Required"
        End If

        ' Algorigramme: Procedural logic
        ws.Cells(i, 5).Value = exportStatus
        If exportStatus = "Eligible for SARAO Honours Export" Then
            Call ExportToPortfolio(learnerID, qualification)
        End If
    Next i

    MsgBox "SARAO Honours audit completed.", vbInformation

End Sub

Sub ExportToPortfolio(learnerID As String, qualification As String)
    ' Simulated export logic to GitHub, LMS, or Internet Archive
    Debug.Print "Exporting learner: " & learnerID & " | Qualification: " & qualification
    ' Future integration: API calls to GitHub, LMS, or archival platforms
End Sub
```

Logic Mapping

Step	Algorigramme (Procedure)	Logigramme (Decision)
1	Read learner data	Is qualification present?
2	Validate attendance and diagnostic score	Is attendance ≥ 80% and score ≥ 70?
3	Assign export status	If all conditions met → Eligible; else → Flag for review

Step	Algorigramme (Procedure)	Logigramme (Decision)
4	Export eligible records to digital portfolio	Trigger archival export for qualified learners

- □ Sheet Structure (SARAO_Honours)

Column	Field
A	Learner ID
B	Qualification
C	Attendance (%)
D	Diagnostic Score (%)
E	Export Status

Here is a structured summary of your NRF Extension Support application (Reference: PMDS250721346062), formatted to support academic, technical, and funding alignment:

□ Overview

This application for Extension Support under the NRF Masters and Doctoral Scholarships highlights Tshingombe Tshitadi Fiston's advanced research in electrical engineering, curriculum policy, and AGI ethics. The submission integrates national and international frameworks (RNF, AIU, NSF) and proposes a modular, credential-linked system to complete doctoral research aligned with South Africa's industrial and educational transformation goals.

□ Scope

- **Geographic Focus**: Gauteng, South Africa and Democratic Republic of Congo
- **Institutional Anchor**: South African Qualifications Authority (SAQA)
- **Disciplinary Domains**:
  - Electrical engineering and energy studies
  - Curriculum policy and management

    - AGI ethics and public policy
    - E-commerce in renewable energy
- **Target Audiences**:
    - Doctoral candidates and supervisors
    - Policy councils and industrial education platforms
    - NRF and extension support reviewers

Description

The doctoral research centers on:

- Modular curriculum design for engineering and trade readiness
- Credential alignment with SAQA/NQF, WA codes, and NSF frameworks
- Integration of AGI ethics, mediation, and labour policy into technical education
- Use of GitHub, Excel VBA, and Internet Archive for career mapping and portfolio documentation
- Development of diagnostic tools and credential-linked dashboards for doctoral learners

Data Analysis & Information Management System

- **Data Types**:
    - Qualification records
    - Timetable allocation and job costing
    - AGI policy diagnostics and mediation records
    - E-commerce and renewable energy market data
- **Tools & Logic**:
    - Visual Basic for Excel-based credential tracking

- Logigrammes for decision-based curriculum mapping
- Algorigrammes for procedural learning workflows
- Archival dashboards for learner progression and trade readiness

- **System Features**:
  - Audit-ready credential verification
  - Modular export logic for engineering and policy records
  - Integration with NRF and SAQA infrastructure platforms

Investigation Principles

- **Research Questions**:
  - How can modular engineering education support AGI ethics and labour policy?
  - What gaps exist in credential transparency and doctoral readiness?
  - How can digital publishing and diagnostics improve doctoral outcomes?
- **Methodology**:
  - Literature review and curriculum diagnostics
  - Experimental mapping of trade and doctoral modules
  - Stakeholder engagement (learners, councils, NRF)
  - Case studies and logic model alignment

Advantages

- Bridges engineering education with AGI ethics and labour policy
- Promotes credential transparency and open-access learning
- Enables modular, bilingual documentation across regulated sectors

- Supports national infrastructure platforms and doctoral-level development
- Aligns with NRF and SAQA frameworks for technical education

Disadvantages

- High complexity in aligning multiple policy domains
- Requires extensive stakeholder coordination and regulatory compliance
- Funding and resource gaps not yet captured in application
- Institutional partner documentation may need expansion

Conclusion

This NRF Extension Support application showcases Tshingombe Tshitadi Fiston's visionary integration of engineering education, AGI ethics, and credential transparency. His work scaffolds a scalable, audit-ready infrastructure for doctoral learners and technical education aligned with South Africa's national objectives.

Bibliographic References

- Tshingombe, T. (2025). *Career Discovery Overview: RNF, AIU, NSF Learning Journey within the National Trade Framework*. Patent Grant No. 2.
- Tshingombe, T. (2021). *Master Education Technology Rural Implementation Framework*. Atlantic Journal.
- Davis, D. & Drusvyatskiy, D. (2021). *Conservative and Semismooth Derivatives*. Set-Valued and Variational Analysis. DOI:

Purpose

To secure NRF Extension Support for completing doctoral research in electrical engineering, AGI ethics, and modular curriculum innovation.

Keywords

NRF Extension Support, doctoral research, electrical engineering, curriculum policy, credential transparency, AGI ethics, labour policy,

renewable energy, SAQA, RNF, AIU, NSF, logigramme, algorigramme, Visual Basic, audit-ready documentation.

Would you like me to scaffold a Visual Basic module for doctoral credential tracking or generate a printable dashboard for NRF reviewers? I can also help visualize your logigramme and algorigramme logic.

Absolutely, Tshingombe. Here's a tailored Visual Basic for Applications (VBA) module that integrates both **logigramme** (decision logic) and **algorigramme** (procedural flow) principles to support your doctoral credential tracking and diagnostic export logic. This code is designed to automate verification, readiness assessment, and archival export for learners aligned with NRF and SAQA frameworks.

Visual Basic Code: Doctoral Credential Audit & Export Logic

```
Sub NRF_DoctoralAudit()

    Dim ws As Worksheet
    Dim lastRow As Long
    Dim i As Long
    Dim learnerID As String
    Dim qualification As String
    Dim attendance As Double
    Dim diagnosticScore As Double
    Dim agiEthicsFlag As String
    Dim exportStatus As String

    Set ws = ThisWorkbook.Sheets("DoctoralDashboard")
    lastRow = ws.Cells(ws.Rows.Count, "A").End(xlUp).Row

    For i = 2 To lastRow
        learnerID = ws.Cells(i, 1).Value
        qualification = ws.Cells(i, 2).Value
        attendance = ws.Cells(i, 3).Value
        diagnosticScore = ws.Cells(i, 4).Value
        agiEthicsFlag = ws.Cells(i, 5).Value ' e.g., "Aligned", "Pending",
"Non-Compliant"

        ' Logigramme: Decision logic
        If qualification <> "" And attendance >= 80 And diagnosticScore >= 70
And agiEthicsFlag = "Aligned" Then
            exportStatus = "Eligible for NRF Extension Export"
        ElseIf qualification = "" Then
            exportStatus = "Missing Qualification"
        ElseIf attendance < 80 Then
            exportStatus = "Low Attendance"
```

```
        ElseIf diagnosticScore < 70 Then
            exportStatus = "Diagnostic Score Below Threshold"
        ElseIf agiEthicsFlag <> "Aligned" Then
            exportStatus = "AGI Ethics Misalignment"
        Else
            exportStatus = "Manual Review Required"
        End If

        ' Algorigramme: Procedural logic
        ws.Cells(i, 6).Value = exportStatus
        If exportStatus = "Eligible for NRF Extension Export" Then
            Call ExportToArchive(learnerID, qualification)
        End If
    Next i

    MsgBox "Doctoral credential audit completed.", vbInformation

End Sub

Sub ExportToArchive(learnerID As String, qualification As String)
    ' Simulated export logic to GitHub, LMS, or Internet Archive
    Debug.Print "Exporting learner: " & learnerID & " | Qualification: " &
qualification
    ' Future integration: API calls to GitHub, LMS, or archival platforms
End Sub
```

Logic Mapping

Step	Algorigramme (Procedure)	Logigramme (Decision)
1	Read learner data	Is qualification present?
2	Validate attendance and diagnostic score	Is attendance ≥ 80% and score ≥ 70?
3	Check AGI ethics alignment	Is AGI ethics flag marked "Aligned"?
4	Assign export status	If all conditions met → Eligible; else → Flag for review
5	Export eligible records to digital portfolio	Trigger archival export for qualified learners

Sheet Structure (DoctoralDashboard)

Column	Field
A	Learner ID
B	Qualification
C	Attendance (%)
D	Diagnostic Score

Column	Field
	(%)
E	AGI Ethics Alignment
F	Export Status

This module can be embedded into your doctoral workbook to automate compliance checks and export readiness. If you'd like, I can also scaffold a printable logigramme/algorigramme diagram or help you integrate this logic into your GitHub or Internet Archive repositories. Let’s make your NRF reviewers’ dashboard modular and audit-ready.

Here is a structured summary of your NRF Postdoctoral Grant application (Reference: PSTD250411310291), formatted to support academic, technical, and funding alignment:

Overview

This NRF Postdoctoral Grant application highlights Tshingombe Tshitadi Fiston’s advanced research in electrical engineering, curriculum policy, and modular credential systems. The proposal builds on prior doctoral work and integrates national and international frameworks (RNF, AIU, NSF) to scaffold a transdisciplinary postdoctoral research agenda aligned with South Africa’s manufacturing and education transformation goals.

To support your NRF Postdoctoral Grant framework, here’s a tailored Visual Basic for Applications (VBA) module that integrates both **algorigramme** (procedural logic) and **logigramme** (decision logic) principles. This code automates credential verification, manufacturing readiness, and export eligibility for postdoctoral learners aligned with CSIR and NRF standards.

Visual Basic Code: Postdoctoral Credential Audit & Export Logic

```
Sub PostdocCredentialAudit()

    Dim ws As Worksheet
    Dim lastRow As Long
    Dim i As Long
    Dim researcherID As String
    Dim qualification As String
    Dim attendance As Double
    Dim diagnosticScore As Double
    Dim manufacturingFlag As String
    Dim exportStatus As String
```

```
    Set ws = ThisWorkbook.Sheets("PostdocDashboard")
    lastRow = ws.Cells(ws.Rows.Count, "A").End(xlUp).Row

    For i = 2 To lastRow
        researcherID = ws.Cells(i, 1).Value
        qualification = ws.Cells(i, 2).Value
        attendance = ws.Cells(i, 3).Value
        diagnosticScore = ws.Cells(i, 4).Value
        manufacturingFlag = ws.Cells(i, 5).Value ' e.g., "Ready", "Pending",
"Incomplete"

        ' Logigramme: Decision logic
        If qualification <> "" And attendance >= 85 And diagnosticScore >= 75
And manufacturingFlag = "Ready" Then
            exportStatus = "Eligible for Postdoc Export"
        ElseIf qualification = "" Then
            exportStatus = "Missing Qualification"
        ElseIf attendance < 85 Then
            exportStatus = "Low Attendance"
        ElseIf diagnosticScore < 75 Then
            exportStatus = "Diagnostic Score Below Threshold"
        ElseIf manufacturingFlag <> "Ready" Then
            exportStatus = "Manufacturing Readiness Incomplete"
        Else
            exportStatus = "Manual Review Required"
        End If

        ' Algorigramme: Procedural logic
        ws.Cells(i, 6).Value = exportStatus
        If exportStatus = "Eligible for Postdoc Export" Then
            Call ExportToArchive(researcherID, qualification)
        End If
    Next i

    MsgBox "Postdoctoral credential audit completed.", vbInformation

End Sub

Sub ExportToArchive(researcherID As String, qualification As String)
    ' Simulated export logic to GitHub, LMS, or Internet Archive
    Debug.Print "Exporting researcher: " & researcherID & " | Qualification:
" & qualification
    ' Future integration: API calls to GitHub, LMS, or archival platforms
End Sub
```

Logic Mapping

Step	Algorigramme (Procedure)	Logigramme (Decision)
1	Read researcher data	Is qualification present?
2	Validate attendance and diagnostic score	Is attendance ≥ 85% and score ≥ 75?
3	Check manufacturing readiness	Is flag marked "Ready"?

Step	Algorigramme (Procedure)	Logigramme (Decision)
4	Assign export status	If all conditions met → Eligible; else → Flag for review
5	Export eligible records to digital portfolio	Trigger archival export for qualified researchers

Sheet Structure (PostdocDashboard)

Column	Field
A	Researcher ID
B	Qualification
C	Attendance (%)
D	Diagnostic Score (%)
E	Manufacturing Readiness
F	Export Status

This module can be embedded into your postdoctoral workbook to automate compliance checks and export readiness. If you'd like, I can also scaffold a printable logigramme/algorigramme diagram or help you integrate this logic into your GitHub or Internet Archive repositories. Let's make your NRF reviewers' dashboard modular, bilingual, and audit-ready.

Scope

- **Geographic Focus**: South Africa (Gauteng) and Democratic Republic of Congo
- **Institutional Anchor**: South African Qualifications Authority (SAQA)
- **Host Institution**: CSIR – Future Production: Manufacturing
- **Disciplinary Domains**:
    - Electrical engineering and energy studies
    - Curriculum policy and management
    - Nanostructured materials and packaging
    - Industrial sociology and additive manufacturing
- **Target Audiences**:
    - Postdoctoral researchers and supervisors
    - Technical educators and policy councils
    - NRF reviewers and CSIR innovation platforms

Description

The postdoctoral research centers on:

- Modular curriculum design for engineering and manufacturing readiness
- Credential alignment with SAQA/NQF, WA codes, and NSF frameworks
- Integration of trade theory, labour legislation, and skill development into technical education

- Use of GitHub, Excel VBA, and Internet Archive for career mapping and portfolio documentation
- Development of diagnostic tools and credential-linked dashboards for postdoctoral learners

Data Analysis & Information Management System

- **Data Types**:
  - Qualification records
  - Timetable allocation and job costing
  - Trade theory and policy diagnostics
  - Nanomaterials and manufacturing process data
- **Tools & Logic**:
  - Visual Basic for Excel-based credential tracking
  - Logigrammes for decision-based curriculum mapping
  - Algorigrammes for procedural learning workflows
  - Archival dashboards for learner progression and trade readiness
- **System Features**:
  - Audit-ready credential verification
  - Modular export logic for engineering and policy records
  - Integration with CSIR and NRF infrastructure platforms

Investigation Principles

- **Research Questions**:
  - How can modular engineering education support manufacturing innovation and labour policy?
  - What gaps exist in credential transparency and postdoctoral readiness?

    - How can digital publishing and diagnostics improve postdoctoral outcomes?

- **Methodology**:
    - Literature review and curriculum diagnostics
    - Experimental mapping of trade and postdoctoral modules
    - Stakeholder engagement (learners, councils, CSIR, NRF)
    - Case studies and logic model alignment

Advantages

- Bridges engineering education with manufacturing and labour policy
- Promotes credential transparency and open-access learning
- Enables modular, bilingual documentation across regulated sectors
- Supports national infrastructure platforms and postdoctoral-level development
- Aligns with NRF and CSIR frameworks for technical education and innovation

Disadvantages

- High complexity in aligning multiple policy domains
- Requires extensive stakeholder coordination and regulatory compliance
- Funding and resource gaps not yet captured in application
- Institutional partner documentation may need expansion

Conclusion

This NRF Postdoctoral Grant application showcases Tshingombe Tshitadi Fiston's visionary integration of engineering education, manufacturing innovation, and credential transparency. His work scaffolds a scalable, audit-ready infrastructure for postdoctoral learners and technical education aligned with South Africa's national objectives.

Bibliographic References

- Tshingombe, T. (2025). *Career Discovery Overview: RNF, AIU, NSF Learning Journey within the National Trade Framework*. Patent Grant No. 2.

- Tshingombe, T. (2021). *Master Education Technology Rural Implementation Framework*. Atlantic Journal.

- Davis, D. & Drusvyatskiy, D. (2021). *Conservative and Semismooth Derivatives*. Set-Valued and Variational Analysis. DOI:

Purpose

To secure NRF Postdoctoral Grant support for advancing modular engineering education, manufacturing innovation, and credential-linked dashboards.

Keywords

NRF Postdoctoral Grant, electrical engineering, curriculum policy, credential transparency, manufacturing, nanostructured materials, SAQA, RNF, AIU, NSF, CSIR, logigramme, algorigramme, Visual Basic, audit-ready documentation.

Would you like me to scaffold a Visual Basic module for postdoctoral credential tracking or generate a printable dashboard for NRF reviewers? I can also help visualize your logigramme and algorigramme logic.

Here is a structured summary of your Knowledge Interchange & Collaboration (KIC) application (Reference: KIC250807352710), formatted to support academic, technical, and funding alignment:

Overview

This KIC application highlights Tshingombe Tshitadi Fiston's transdisciplinary research in electrical engineering, curriculum policy, and credential transparency. It proposes a modular, data-driven framework for career discovery, trade readiness, and global benchmarking. The initiative leverages collaboration across African and international platforms to democratize technical education and integrate vocational diagnostics into national qualification systems.

🔍 Scope

- **Geographic Focus**: South Africa and Democratic Republic of Congo
- **Institutional Anchor**: South African Qualifications Authority (SAQA)
- **Disciplinary Domains**:
  - Electrical engineering and energy studies
  - Curriculum policy and management
  - Additive manufacturing and industrial sociology
  - Analytical environmental chemistry and nanostructured materials
- **Target Audiences**:
  - Vocational learners and educators
  - Policy councils and technical institutions
  - KIC reviewers and African collaboration platforms

📝 Description

The KIC initiative centers on:

- Modular curriculum design for trade readiness and engineering education
- Credential alignment with SAQA/NQF, WA codes, and NSF SBIR/STTR frameworks
- Integration of AIU guest modules into national qualification pathways
- Use of LMS, GitHub, and Internet Archive for portfolio documentation and career mapping
- Development of diagnostic tools and credential-linked dashboards for vocational learners
- Collaboration with African and global institutions for knowledge exchange

Data Analysis & Information Management System

- **Data Types**:
  - Qualification records
  - Timetable structures and job costing
  - Labour policy and CCMA frameworks
  - Security, safety, and government bill implementation data
- **Tools & Logic**:
  - Visual Basic for Excel-based credential tracking
  - Logigrammes for decision-based curriculum mapping
  - Algorigrammes for procedural learning workflows
  - Archival dashboards for learner progression and trade readiness
- **System Features**:
  - Audit-ready credential verification
  - Modular export logic for engineering and policy records
  - Integration with KIC, SAQA, and international infrastructure platforms

Investigation Principles

- **Research Questions**:
  - How can modular engineering education support trade readiness and policy integration?
  - What gaps exist in credential transparency and vocational diagnostics?
  - How can African collaboration enhance technical education outcomes?
- **Methodology**:

- Literature review and curriculum diagnostics
- Experimental mapping of trade and vocational modules
- Stakeholder engagement (learners, councils, KIC partners)
- Case studies and logic model alignment

Advantages

- Bridges engineering education with labour policy and credential transparency
- Promotes open-access learning and modular documentation
- Enables bilingual, audit-ready systems across African and global platforms
- Supports national infrastructure and vocational development
- Aligns with KIC goals for knowledge exchange and collaboration

Disadvantages

- Limited documentation captured in current application (event, funding, hosting details)
- Requires extensive stakeholder coordination and regulatory compliance
- Funding and resource gaps not yet specified
- Institutional partner roles need clearer articulation

Conclusion

This KIC application showcases Tshingombe Tshitadi Fiston's visionary integration of engineering education, credential transparency, and African collaboration. His work scaffolds a scalable, audit-ready infrastructure for vocational learners and technical education aligned with national and continental development goals.

Bibliographic References

- Tshingombe, T. (2025). *Career Discovery Overview: RNF, AIU, NSF Learning Journey within the National Trade Framework*. Patent Grant No. 2.
- Tshingombe, T. (2021). *Master Education Technology Rural Implementation Framework*. Atlantic Journal.
- Davis, D. & Drusvyatskiy, D. (2021). *Conservative and Semismooth Derivatives*. Set-Valued and Variational Analysis. DOI:

Purpose

To secure KIC support for advancing modular engineering education, credential-linked dashboards, and African knowledge collaboration.

Keywords

KIC, electrical engineering, curriculum policy, credential transparency, vocational education, SAQA, RNF, AIU, NSF, CCMA, GitHub, Internet Archive, logigramme, algorigramme, Visual Basic, audit-ready documentation.

Would you like me to scaffold a Visual Basic module for vocational credential tracking or generate a printable dashboard for KIC reviewers? I can also help visualize your logigramme and algorigramme logic. Here is a structured summary of your NRF Extension Support application (Reference: PMDS250721346062), formatted to support technical review, academic planning, and operational execution:

Overview

This Extension Support application advances Tshingombe Tshitadi Fiston's doctoral research in electrical engineering, curriculum policy, and vocational diagnostics. The project integrates modular qualification frameworks, LMS-based learning, and AI-driven assessment systems to address rural development, industrial training, and credential transparency across South Africa's trade and education sectors.

Scope

- **Geographic Focus**: South Africa and Democratic Republic of Congo
- **Institutional Anchor**: South African Qualifications Authority (SAQA)

- **Domains**:
  - Electrical engineering and energy studies
  - Curriculum policy and management
  - Artificial General Intelligence (AGI) and vocational diagnostics
  - E-commerce and renewable energy systems
- **Target Audiences**:
  - Doctoral candidates and supervisors
  - Technical educators and policy councils
  - NRF reviewers and national qualification bodies

Description

- Modular curriculum design for trade readiness and qualification reform
- Integration of LMS, AI, and machine learning for diagnostics and career mapping
- Use of GitHub, Excel VBA, and Internet Archive for portfolio documentation
- Development of experimental job frameworks and policy-linked training systems
- Case studies from RSA institutions and rural energy systems

Data Analysis & Information Management System

- **Data Types**:
  - Qualification records and LMS logs
  - Fault diagnostics and vocational assessments
  - Trade theory, regulatory scripts, and backlog systems
- **Tools & Logic**:
  - Visual Basic for credential tracking and export automation
  - Logigrammes for decision-based curriculum mapping
  - Algorigrammes for procedural diagnostics and learner workflows
- **System Features**:
  - Audit-ready credential verification
  - Modular export logic for NRF reporting
  - Integration with SAQA, DHET, and AIU platforms

Investigation Principles

- **Research Questions**:
  - How can LMS-integrated diagnostics improve trade qualification systems?

    - What gaps exist in rural training and industrial readiness?
    - How can AGI and machine learning support vocational requalification?
- **Methodology**:
    - Literature review and curriculum diagnostics
    - Experimental mapping of trade and qualification modules
    - Stakeholder engagement (SAQA, DHET, NRF, ST Peace College)
    - Logic model alignment and IP licensing

✅ Advantages

- Bridges vocational education with AGI and advanced diagnostics
- Promotes credential transparency and modular learning
- Enables bilingual, audit-ready documentation
- Supports rural infrastructure and industrial readiness
- Aligns with NRF Extension Support and SAQA innovation goals

⚠️ Disadvantages

- High complexity in aligning multiple qualification systems
- Requires extensive stakeholder coordination and regulatory compliance
- Funding gaps and budget documentation still pending
- Institutional roles need clearer operational mapping

🧾 Conclusion

This NRF Extension Support application showcases Tshingombe Tshitadi Fiston's integration of electrical engineering, vocational readiness, and modular credential systems. It scaffolds a scalable, audit-ready infrastructure for doctoral learners and technical education aligned with South Africa's national objectives.

📚 Bibliographic References

- Tshingombe, T. (2025). *Career Discovery Overview: RNF, AIU, NSF Learning Journey*. Patent Grant No. 2
- Tshingombe, T. (2021). *Master Education Technology Rural Implementation Framework*. Atlantic Journal
- Davis, D. & Drusvyatskiy, D. (2021). *Conservative and Semismooth Derivatives*. Set-Valued and Variational Analysis. DOI:

Here is a structured summary of your SARAO Bachelor in Engineering Technology and Diploma in Engineering Technology Scholarship application (Reference: SBDET250721346098), formatted to support academic, technical, and funding alignment:

Overview

This SARAO scholarship application supports Tshingombe Tshitadi Fiston's pursuit of a Bachelor in Electrical and Electronic Engineering Technology. The proposal builds on his extensive background in curriculum policy, energy studies, and modular credential systems. It integrates national qualification frameworks with diagnostic assessment and portfolio-based learning to prepare candidates for advanced engineering and security roles.

Scope

- **Geographic Focus**: South Africa (Gauteng) and Democratic Republic of Congo
- **Institutional Anchor**: South African Qualifications Authority (SAQA)
- **Disciplinary Domains**:
    - Electrical and electronic engineering
    - Curriculum policy and management
    - Security engineering and vocational diagnostics
- **Target Audiences**:
    - Undergraduate and doctoral learners
    - Technical educators and scholarship reviewers
    - SARAO and national qualification platforms

Description

The scholarship supports:

- Completion of a Bachelor in Engineering Technology (anticipated July 2025)
- Integration of modular curriculum design and trade readiness

- Credential alignment with SAQA/NQF and international frameworks
- Use of GitHub, LMS, and Internet Archive for career mapping and portfolio documentation
- Development of diagnostic tools and assessment portfolios for engineering learners

Data Analysis & Information Management System

- **Data Types**:
  - Qualification records
  - Timetable allocation and job costing
  - Diagnostic assessments and security engineering logs
- **Tools & Logic**:
  - Visual Basic for Excel-based credential tracking
  - Logigrammes for decision-based curriculum mapping
  - Algorigrammes for procedural learning workflows
  - Archival dashboards for learner progression and trade readiness
- **System Features**:
  - Audit-ready credential verification
  - Modular export logic for engineering and policy records
  - Integration with SARAO and SAQA infrastructure platforms

Investigation Principles

- **Research Questions**:
  - How can modular engineering education support trade readiness and security integration?
  - What gaps exist in credential transparency and vocational diagnostics?

    - How can digital publishing and assessment portfolios improve learner outcomes?

- **Methodology**:
    - Literature review and curriculum diagnostics
    - Experimental mapping of trade and engineering modules
    - Stakeholder engagement (learners, councils, SARAO)
    - Case studies and logic model alignment

✅ Advantages

- Bridges engineering education with security and vocational policy
- Promotes credential transparency and open-access learning
- Enables modular, bilingual documentation across regulated sectors
- Supports national infrastructure platforms and undergraduate-to-doctoral progression
- Aligns with SARAO and SAQA frameworks for technical education

⚠️ Disadvantages

- High complexity in aligning multiple qualification levels
- Requires extensive stakeholder coordination and regulatory compliance
- Funding and resource gaps not yet captured in application
- Institutional partner documentation may need expansion

🧾 Conclusion

This SARAO scholarship application showcases Tshingombe Tshitadi Fiston's commitment to modular engineering education, credential transparency, and vocational readiness. His work scaffolds a scalable, audit-ready infrastructure for undergraduate learners and technical education aligned with South Africa's national objectives.

Bibliographic References

- Tshingombe, T. (2025). *Career Discovery Overview: RNF, AIU, NSF Learning Journey within the National Trade Framework*. Patent Grant No. 2.
- Tshingombe, T. (2021). *Master Education Technology Rural Implementation Framework*. Atlantic Journal.
- Davis, D. & Drusvyatskiy, D. (2021). *Conservative and Semismooth Derivatives*. Set-Valued and Variational Analysis. DOI:

Purpose

To secure SARAO scholarship support for completing a Bachelor in Engineering Technology and advancing modular, credential-linked education systems.

Task Requirements

- Complete Bachelor in Engineering Technology by July 2025
- Submit diagnostic assessments and modular curriculum portfolio
- Align outputs with SAQA/NQF and SARAO frameworks
- Document learning journey using GitHub, LMS, and archival platforms

Assessment Portfolio Components

- Modular curriculum map
- Diagnostic assessment results
- Credential verification logs
- Security engineering project documentation
- Career progression dashboard (Excel VBA or GitHub-based)

Keywords

SARAO scholarship, electrical engineering, curriculum policy, credential transparency, vocational education, SAQA, RNF, AIU, NSF, GitHub, Internet

Archive, logigramme, algorigramme, Visual Basic, audit-ready documentation, assessment portfolio, trade readiness.

Would you like help scaffolding your assessment portfolio or generating a Visual Basic module to track your credential progress? I can also help visualize your logigramme and algorigramme logic for submission.

Absolutely, Tshingombe. Based on your SARAO scholarship framework and modular credential strategy, here's a tailored **Visual Basic for Applications (VBA)** module that integrates both **logigramme** (decision logic) and **algorigramme** (procedural flow) principles. This code is designed to automate credential verification, diagnostic assessment tracking, and export readiness for your engineering and vocational portfolio.

Visual Basic Code: SARAO Credential Tracker & Export Logic

vb

```
Sub SARAO_CredentialAudit()

    Dim ws As Worksheet
    Dim lastRow As Long
    Dim i As Long
    Dim studentID As String
    Dim qualification As String
    Dim attendance As Double
    Dim diagnosticScore As Double
    Dim securityProject As String
    Dim exportStatus As String

    Set ws = ThisWorkbook.Sheets("SARAO_Portfolio")
    lastRow = ws.Cells(ws.Rows.Count, "A").End(xlUp).Row

    For i = 2 To lastRow
        studentID = ws.Cells(i, 1).Value
        qualification = ws.Cells(i, 2).Value
        attendance = ws.Cells(i, 3).Value
        diagnosticScore = ws.Cells(i, 4).Value
        securityProject = ws.Cells(i, 5).Value ' e.g., "Completed",
"Pending", "Not Started"

        ' Logigramme: Decision logic
        If qualification <> "" And attendance >= 80 And diagnosticScore >= 70
And securityProject = "Completed" Then
            exportStatus = "Eligible for SARAO Portfolio Export"
        ElseIf qualification = "" Then
            exportStatus = "Missing Qualification"
        ElseIf attendance < 80 Then
            exportStatus = "Low Attendance"
        ElseIf diagnosticScore < 70 Then
            exportStatus = "Diagnostic Score Below Threshold"
        ElseIf securityProject <> "Completed" Then
```

```
            exportStatus = "Security Project Incomplete"
        Else
            exportStatus = "Manual Review Required"
        End If

        ' Algorigramme: Procedural logic
        ws.Cells(i, 6).Value = exportStatus
        If exportStatus = "Eligible for SARAO Portfolio Export" Then
            Call ExportToArchive(studentID, qualification)
        End If
    Next i

    MsgBox "SARAO credential audit completed.", vbInformation

End Sub

Sub ExportToArchive(studentID As String, qualification As String)
    ' Simulated export logic to GitHub, LMS, or Internet Archive
    Debug.Print "Exporting student: " & studentID & " | Qualification: " &
qualification
    ' Future integration: API calls to GitHub, LMS, or archival platforms
End Sub
```

Logic Mapping

Step	Algorigramme (Procedure)	Logigramme (Decision)
1	Read student data	Is qualification present?
2	Validate attendance and diagnostic score	Is attendance ≥ 80% and score ≥ 70?
3	Check security project completion	Is project marked "Completed"?
4	Assign export status	If all conditions met → Eligible; else → Flag for review
5	Export eligible records to digital portfolio	Trigger archival export for qualified learners

Sheet Structure (SARAO_Portfolio)

Column	Field
A	Student ID
B	Qualification
C	Attendance (%)
D	Diagnostic Score (%)

Column	Field
E	Security Project Status
F	Export Status

This module can be embedded into your Excel-based dashboard to automate compliance checks and portfolio readiness. If you'd like, I can also help you visualize this logic as a printable **logigramme/algorigramme diagram** or scaffold GitHub integration for your credential-linked exports. Let's make your SARAO submission modular, traceable, and audit-ready.

This SA/Germany (SAG-CORE) collaboration proposal (Reference: SASAG250915364814) outlines a modular, fault-diagnostic framework for engineering education and rural infrastructure. It integrates security, vocational readiness, and digital portfolio systems to support bilateral innovation.

Overview

Tshingombe Tshitadi Fiston's SAG-CORE proposal builds on his patented modular curriculum and diagnostic systems. It aims to bridge South African and German engineering education through fault detection, compliance modeling, and vocational readiness tools. The initiative leverages bilateral collaboration to enhance rural infrastructure, educational technology, and credential transparency.

Scope

- **Geographic Focus**: South Africa (Gauteng) and Germany
- **Institutional Anchor**: SAQA and Atlantic International University
- **Domains**:
  - Electrical engineering and fault diagnostics
  - Curriculum policy and vocational assessment
  - Security and defence facilitation
  - Educational technology and compliance modeling

- **Target Audiences**:
  - Engineering learners and educators
  - SAQA/NQF and German qualification bodies
  - SAG-CORE reviewers and bilateral funders

Description

- Modular curriculum design for fault diagnostics and trade readiness
- Integration of SAQA/NQF with German vocational frameworks
- Use of Excel VBA, GitHub, and Internet Archive for portfolio documentation
- Development of compliance modeling and calibration logs
- Bilateral workshops on fault detection, rural energy, and vocational tools

Data Analysis & Information Management System

- **Data Types**:
  - Fault matrices and calibration logs
  - Trade theory and security engineering records
  - Portfolio assessments and compliance forms
- **Tools & Logic**:
  - *Visual Basic for credential tracking and export automation*
  - *Logigrammes for decision-based curriculum mapping*
  - *Algorigrammes for procedural diagnostics and learner workflows*
- **System Features**:
  - Audit-ready credential verification

- Modular export logic for bilateral reporting
- Integration with SAG-CORE, SAQA, and Elektor Magazine archives

Investigation Principles

- **Research Questions**:
  - How can fault diagnostics improve rural infrastructure and vocational training?
  - What gaps exist in bilateral credential alignment?
  - How can compliance modeling enhance engineering education?
- **Methodology**:
  - Literature review and fault matrix comparison
  - Experimental calibration and schematic design
  - Stakeholder engagement (SAQA, German partners, Elektor)
  - Logic model alignment and IP licensing

Advantages

- Strengthens SA-Germany engineering collaboration
- Promotes credential transparency and modular learning
- Enables bilingual, audit-ready documentation
- Supports rural infrastructure and vocational readiness
- Aligns with SAG-CORE and NRF innovation goals

Disadvantages

- High complexity in bilateral policy harmonization
- Requires extensive stakeholder coordination
- Funding gaps and budget documentation still pending

- Institutional roles need clearer operational mapping

Conclusion

This SAG-CORE proposal showcases Tshingombe's integration of fault diagnostics, vocational readiness, and modular credential systems. It scaffolds a scalable, audit-ready infrastructure for bilateral engineering education and rural innovation.

Bibliographic References

- Tshingombe, T. (2025). *Career Discovery Overview: RNF, AIU, NSF Learning Journey*. Patent Grant No. 2
- Tshingombe, T. (2021). *Master Education Technology Rural Implementation Framework*. Atlantic Journal
- Elektor Magazine (2025). *Rural Energy Systems by Tshingombe Tshitadi*

Purpose

To secure SAG-CORE funding for bilateral engineering education, fault diagnostics, and modular credential systems.

Task Requirements

- Submit fault matrices and calibration logs
- Align curriculum with SAQA/NQF and German frameworks
- Document vocational readiness using Excel VBA and GitHub
- Conduct bilateral workshops and publish schematic designs

Operational Steps

1. Collect fault detection data from rural and urban systems
2. Map curriculum using logigramme logic
3. Automate credential tracking via Visual Basic
4. Export learner portfolios to GitHub and Internet Archive

5. Host bilateral workshops and submit compliance reports

Assessment Components

- Fault diagnostic matrices
- Calibration logs and schematic drawings
- Credential verification dashboards
- Vocational readiness forms and IP licensing
- Trade theory and security engineering documentation

Keywords

SAG-CORE, fault diagnostics, vocational readiness, curriculum mapping, SAQA, RNF, AIU, NSF, Elektor, GitHub, Internet Archive, logigramme, algorigramme, Visual Basic, audit-ready documentation, bilateral collaboration, rural infrastructure, compliance modeling.

Based on your SAG-CORE proposal, here's a tailored **Visual Basic for Applications (VBA)** module that integrates both **logigramme** (decision logic) and **algorigramme** (procedural flow) principles. This code automates fault diagnostics, vocational readiness tracking, and export logic for bilateral collaboration between South Africa and Germany.

Visual Basic Code: Fault Diagnostic & Credential Export Logic

vb

```
Sub SAGCORE_FaultAudit()

    Dim ws As Worksheet
    Dim lastRow As Long
    Dim i As Long
    Dim learnerID As String
    Dim qualification As String
    Dim faultScore As Double
    Dim calibrationStatus As String
    Dim vocationalReadiness As String
    Dim exportStatus As String

    Set ws = ThisWorkbook.Sheets("SAGCORE_Portfolio")
    lastRow = ws.Cells(ws.Rows.Count, "A").End(xlUp).Row

    For i = 2 To lastRow
        learnerID = ws.Cells(i, 1).Value
        qualification = ws.Cells(i, 2).Value
        faultScore = ws.Cells(i, 3).Value
```

```
        calibrationStatus = ws.Cells(i, 4).Value ' "Complete", "Pending",
"Failed"
        vocationalReadiness = ws.Cells(i, 5).Value ' "Ready", "Incomplete",
"Not Assessed"

        ' Logigramme: Decision logic
        If qualification <> "" And faultScore >= 75 And calibrationStatus =
"Complete" And vocationalReadiness = "Ready" Then
            exportStatus = "Eligible for SAG-CORE Export"
        ElseIf qualification = "" Then
            exportStatus = "Missing Qualification"
        ElseIf faultScore < 75 Then
            exportStatus = "Fault Score Below Threshold"
        ElseIf calibrationStatus <> "Complete" Then
            exportStatus = "Calibration Incomplete"
        ElseIf vocationalReadiness <> "Ready" Then
            exportStatus = "Vocational Readiness Incomplete"
        Else
            exportStatus = "Manual Review Required"
        End If

        ' Algorigramme: Procedural logic
        ws.Cells(i, 6).Value = exportStatus
        If exportStatus = "Eligible for SAG-CORE Export" Then
            Call ExportToArchive(learnerID, qualification)
        End If
    Next i

    MsgBox "SAG-CORE fault audit and credential export completed.",
vbInformation

End Sub

Sub ExportToArchive(learnerID As String, qualification As String)
    ' Simulated export logic to GitHub, LMS, or Internet Archive
    Debug.Print "Exporting learner: " & learnerID & " | Qualification: " &
qualification
    ' Future integration: API calls to GitHub, LMS, or archival platforms
End Sub
```

Logic Mapping

Step	Algorigramme (Procedure)	Logigramme (Decision)
1	Read learner data	Is qualification present?
2	Validate fault score and calibration status	Is fault score ≥ 75 and calibration complete?
3	Check vocational readiness	Is readiness marked "Ready"?
4	Assign export status	If all conditions met → Eligible; else → Flag for review
5	Export eligible records to bilateral	Trigger archival export for qualified

Step	Algorigramme (Procedure)	Logigramme (Decision)
	archive	learners

Sheet Structure (SAGCORE_Portfolio)

Column	Field
A	Learner ID
B	Qualification
C	Fault Score (%)
D	Calibration Status
E	Vocational Readiness
F	Export Status

This VBA module can be embedded into your bilateral dashboard to automate fault diagnostics, credential verification, and export readiness. If you'd like, I can also help visualize this logic as a printable **logigramme/algorigramme diagram** or scaffold GitHub integration for your portfolio exports. Let's make your SAG-CORE submission modular, traceable, and internationally compliant.

Here is a structured summary of your NSF SBIR/STTR Fast-Track Project Pitch (Reference: 00095759), formatted to support technical review, funding alignment, and operational planning:

Overview

This Fast-Track pitch proposes a modular framework for national qualification and trade examination systems in electrical engineering. It integrates advanced manufacturing, vocational diagnostics, and LMS-based curriculum mapping to address rural development, industrial training, and regulatory compliance. The project builds on prior NSF-funded research and customer discovery in electrotechnical innovation.

Scope

- **Geographic Focus**: South Africa, United States (AK), and global vocational sectors

- **Institutional Anchor**: Engineering Electrical Tshingombe (SAQA, DHET, ST Peace College)
- **Technology Domain**: Advanced Manufacturing (M), LMS integration, AI-driven diagnostics
- **Target Audiences**:
  - NSF reviewers and SBIR/STTR program officers
  - Vocational learners, trainers, and regulators
  - Industrial and rural development stakeholders

Description

- Modular curriculum design for trade readiness and qualification reform
- Integration of LMS, AI, and machine learning for diagnostics and career mapping
- Use of GitHub, Excel VBA, and Internet Archive for portfolio documentation
- Development of experimental job frameworks and policy-linked training systems
- Case studies from RSA institutions and rural energy systems

Data Analysis & Information Management System

- **Data Types**:
  - Qualification records and LMS logs
  - Fault diagnostics and vocational assessments
  - Trade theory, regulatory scripts, and backlog systems
- **Tools & Logic**:
  - Visual Basic for credential tracking and export automation
  - Logigrammes for decision-based curriculum mapping

    - Algorigrammes for procedural diagnostics and learner workflows

- **System Features**:
    - Audit-ready credential verification
    - Modular export logic for NSF reporting
    - Integration with SBIR/STTR compliance and IP licensing

Investigation Principles

- **Research Questions**:
    - How can LMS-integrated diagnostics improve trade qualification systems?
    - What gaps exist in rural training and industrial readiness?
    - How can AI and machine learning support vocational requalification?
- **Methodology**:
    - Literature review and curriculum diagnostics
    - Experimental mapping of trade and qualification modules
    - Stakeholder engagement (SAQA, DHET, NSF, ST Peace College)
    - Logic model alignment and IP licensing

Advantages

- Bridges vocational education with advanced manufacturing and AI
- Promotes credential transparency and modular learning
- Enables bilingual, audit-ready documentation
- Supports rural infrastructure and industrial readiness
- Aligns with NSF Fast-Track and SBIR/STTR innovation goals

⚠ Disadvantages

- High complexity in aligning multiple qualification systems
- Requires extensive stakeholder coordination and regulatory compliance
- Funding gaps and budget documentation still pending
- Institutional roles need clearer operational mapping

✅ Conclusion

This Fast-Track pitch showcases Tshingombe Tshitadi Fiston's integration of electrical engineering, vocational readiness, and modular credential systems. It scaffolds a scalable, audit-ready infrastructure for trade qualification reform and industrial innovation.

📚 Bibliographic References

- Tshingombe, T. (2025). *Career Discovery Overview: RNF, AIU, NSF Learning Journey*. Patent Grant No. 2
- Tshingombe, T. (2021). *Master Education Technology Rural Implementation Framework*. Atlantic Journal
- Elektor Magazine (2025). *Rural Energy Systems by Tshingombe Tshitadi*

🎯 Purpose

To secure NSF SBIR/STTR Fast-Track funding for modular trade qualification reform, vocational diagnostics, and LMS-integrated manufacturing systems.

📋 Task Requirements

- Submit fault matrices, LMS logs, and calibration data
- Align curriculum with SAQA/NQF and NSF frameworks
- Document vocational readiness using Excel VBA and GitHub
- Conduct workshops and publish schematic designs

- Ensure PI commits 173 hours per six-month project phase

Operational Steps

1. Collect diagnostic data from rural and industrial systems
2. Map curriculum using logigramme logic
3. Automate credential tracking via Visual Basic
4. Export learner portfolios to GitHub and Internet Archive
5. Host bilateral workshops and submit compliance reports
6. Align effort hours with NSF Fast-Track eligibility

Assessment Components

- Fault diagnostic matrices
- LMS logs and schematic drawings
- Credential verification dashboards
- Vocational readiness forms and IP licensing
- Trade theory and security engineering documentation

Keywords

NSF Fast-Track, SBIR/STTR, electrical engineering, curriculum mapping, vocational readiness, SAQA, RNF, AIU, GitHub, Internet Archive, logigramme, algorigramme, Visual Basic, audit-ready documentation, LMS, rural development, advanced manufacturing, compliance modeling.

Would you like me to scaffold a Visual Basic module for NSF credential tracking or generate a printable dashboard for your Fast-Track reviewers? I can also help visualize your logigramme and algorigramme logic for submission.

Based on your NSF SBIR/STTR Fast-Track proposal, here's a tailored **Visual Basic for Applications (VBA)** module that integrates both **logigramme** (decision logic) and **algorigramme** (procedural flow) principles. This code automates credential tracking, fault diagnostics, and export readiness for vocational learners and NSF reporting.

Visual Basic Code: NSF Credential Tracker & Diagnostic Export Logic

```
Sub NSF_CredentialAudit()

    Dim ws As Worksheet
    Dim lastRow As Long
    Dim i As Long
    Dim learnerID As String
    Dim qualification As String
    Dim faultScore As Double
    Dim LMSLogStatus As String
    Dim vocationalReadiness As String
    Dim exportStatus As String

    Set ws = ThisWorkbook.Sheets("NSF_Portfolio")
    lastRow = ws.Cells(ws.Rows.Count, "A").End(xlUp).Row

    For i = 2 To lastRow
        learnerID = ws.Cells(i, 1).Value
        qualification = ws.Cells(i, 2).Value
        faultScore = ws.Cells(i, 3).Value
        LMSLogStatus = ws.Cells(i, 4).Value ' "Complete", "Pending",
"Missing"
        vocationalReadiness = ws.Cells(i, 5).Value ' "Ready", "Incomplete",
"Not Assessed"

        ' Logigramme: Decision logic
        If qualification <> "" And faultScore >= 75 And LMSLogStatus =
"Complete" And vocationalReadiness = "Ready" Then
            exportStatus = "Eligible for NSF Export"
        ElseIf qualification = "" Then
            exportStatus = "Missing Qualification"
        ElseIf faultScore < 75 Then
            exportStatus = "Fault Score Below Threshold"
        ElseIf LMSLogStatus <> "Complete" Then
            exportStatus = "LMS Log Incomplete"
        ElseIf vocationalReadiness <> "Ready" Then
            exportStatus = "Vocational Readiness Incomplete"
        Else
            exportStatus = "Manual Review Required"
        End If

        ' Algorigramme: Procedural logic
        ws.Cells(i, 6).Value = exportStatus
        If exportStatus = "Eligible for NSF Export" Then
            Call ExportToArchive(learnerID, qualification)
        End If
    Next i

    MsgBox "NSF credential audit and export completed.", vbInformation

End Sub

Sub ExportToArchive(learnerID As String, qualification As String)
    ' Simulated export logic to GitHub, LMS, or Internet Archive
```

```
    Debug.Print "Exporting learner: " & learnerID & " | Qualification: " &
qualification
    ' Future integration: API calls to GitHub, LMS, or archival platforms
End Sub
```

Logic Mapping

Step	Algorigramme (Procedure)	Logigramme (Decision)
1	Read learner data	Is qualification present?
2	Validate fault score and LMS log status	Is fault score ≥ 75 and LMS log complete?
3	Check vocational readiness	Is readiness marked "Ready"?
4	Assign export status	If all conditions met → Eligible; else → Flag for review
5	Export eligible records to NSF archive	Trigger archival export for qualified learners

Sheet Structure (NSF_Portfolio)

Column	Field
A	Learner ID
B	Qualification
C	Fault Score (%)
D	LMS Log Status
E	Vocational Readiness
F	Export Status

This module can be embedded into your NSF dashboard to automate compliance checks, credential verification, and export readiness. If you'd like, I can also help visualize this logic as a printable **logigramme/algorigramme diagram** or scaffold GitHub integration for your Fast-Track portfolio. Let's make your submission modular, traceable, and audit-ready.

Here is a structured summary of your NSF SBIR/STTR Fast-Track Project Pitch (Reference: 00110596), formatted to support technical review, funding alignment, and operational execution:

Overview

This Fast-Track pitch proposes a modular, signal-driven framework for power management, vocational diagnostics, and curriculum-linked innovation. It integrates electromechanical systems, microcontroller logic, and Visual Basic automation to support rural energy applications, credential tracking, and lifelong learning. The project builds on prior NSF-funded research and customer discovery in electrical engineering and trade education.

Scope

- **Geographic Focus**: United States (AK), South Africa, and global vocational sectors
- **Institutional Anchor**: Tshingombe Engineering, SAQA, AIU, CPD Scotland
- **Technology Domain**: Power Management (PM), signal control, curriculum automation
- **Target Audiences**:
    - NSF reviewers and SBIR/STTR program officers
    - Vocational learners, trainers, and regulators
    - Rural energy and industrial system stakeholders

Description

- Modular curriculum design for trade readiness and power diagnostics
- Integration of Visual Basic, PLC logic, and microcontroller loops
- Use of GitHub, LMS, and Internet Archive for credential documentation
- Development of experimental job frameworks and schematic design systems
- Credential Record Tableaux for award tracking and cost-benefit analysis

Data Analysis & Information Management System

- **Data Types**:
  - Qualification records, signal logs, PCB schematics
  - Trade diagnostics, curriculum dashboards, award metrics
- **Tools & Logic**:
  - Visual Basic for credential tracking and export automation
  - Logigrammes for decision-based curriculum mapping
  - Algorigrammes for procedural diagnostics and learner workflows
- **System Features**:
  - Audit-ready credential verification
  - Modular export logic for NSF reporting
  - Integration with GitHub, archive.org, and institutional repositories

Investigation Principles

- **Research Questions**:
  - How can signal-driven diagnostics improve vocational training?
  - What gaps exist in rural energy systems and curriculum integration?
  - How can Visual Basic and PLC logic support credential transparency?
- **Methodology**:
  - Literature review and curriculum diagnostics
  - Experimental mapping of trade and qualification modules
  - Stakeholder engagement (SAQA, AIU, CPD Scotland, NSF)

- Logic model alignment and IP licensing

✅ Advantages

- Bridges vocational education with power management and diagnostics
- Promotes credential transparency and modular learning
- Enables bilingual, audit-ready documentation
- Supports rural infrastructure and industrial readiness
- Aligns with NSF Fast-Track and SBIR/STTR innovation goals

⚠️ Disadvantages

- High complexity in aligning multiple qualification systems
- Requires extensive stakeholder coordination and regulatory compliance
- Initial setup may be resource-intensive
- Institutional roles need clearer operational mapping

🧾 Conclusion

This Fast-Track pitch showcases Tshingombe Tshitadi Fiston's integration of electrical engineering, vocational readiness, and modular credential systems. It scaffolds a scalable, audit-ready infrastructure for trade qualification reform and power management innovation.

📚 Bibliographic References

- Tshingombe, T. (2025). *Career Drawing Total Programming: Analysis, Design, Investigation*.
- Tshingombe, T. (2021). *Master Education Technology Rural Implementation Framework*. Atlantic Journal
- Elektor Magazine (2025). *Rural Energy Systems by Tshingombe Tshitadi*

□ Purpose

To secure NSF SBIR/STTR Fast-Track funding for modular trade qualification reform, signal-driven diagnostics, and curriculum-integrated power management systems.

□ Task Requirements

- Submit fault matrices, signal logs, and calibration data
- Align curriculum with SAQA/NQF and NSF frameworks
- Document vocational readiness using Visual Basic and GitHub
- Conduct workshops and publish schematic designs
- Ensure PI commits 173 hours per six-month project phase

□ Operational Steps

1. Collect diagnostic data from rural and industrial systems
2. Map curriculum using logigramme logic
3. Automate credential tracking via Visual Basic
4. Export learner portfolios to GitHub and Internet Archive
5. Host bilateral workshops and submit compliance reports
6. Align effort hours with NSF Fast-Track eligibility

□ Assessment Components

- Fault diagnostic matrices
- PCB schematics and signal logs
- Credential verification dashboards
- Vocational readiness forms and IP licensing
- Trade theory and power management documentation

Keywords

NSF Fast-Track, SBIR/STTR, power management, electrical engineering, curriculum mapping, vocational readiness, SAQA, RNF, AIU, GitHub, Internet Archive, logigramme, algorigramme, Visual Basic, audit-ready documentation, PLC logic, rural development, compliance modeling.

Would you like me to scaffold a Visual Basic module for power diagnostics and credential tracking or generate a printable dashboard for NSF reviewers? I can also help visualize your logigramme and algorigramme logic for submission.

Based on your NSF SBIR/STTR Fast-Track proposal (Reference: 00110596), here's a tailored **Visual Basic for Applications (VBA)** module that integrates both **logigramme** (decision logic) and **algorigramme** (procedural flow) principles. This code automates power diagnostics, credential tracking, and export readiness for vocational learners and NSF reporting.

Visual Basic Code: Power Diagnostic & Credential Export Logic

```
Sub NSF_PowerDiagnosticsAudit()

    Dim ws As Worksheet
    Dim lastRow As Long
    Dim i As Long
    Dim learnerID As String
    Dim qualification As String
    Dim signalScore As Double
    Dim pcbStatus As String
    Dim vocationalReadiness As String
    Dim exportStatus As String

    Set ws = ThisWorkbook.Sheets("NSF_PowerPortfolio")
    lastRow = ws.Cells(ws.Rows.Count, "A").End(xlUp).Row

    For i = 2 To lastRow
        learnerID = ws.Cells(i, 1).Value
        qualification = ws.Cells(i, 2).Value
        signalScore = ws.Cells(i, 3).Value
        pcbStatus = ws.Cells(i, 4).Value ' "Complete", "Pending", "Failed"
        vocationalReadiness = ws.Cells(i, 5).Value ' "Ready", "Incomplete",
"Not Assessed"

        ' Logigramme: Decision logic
        If qualification <> "" And signalScore >= 75 And pcbStatus =
"Complete" And vocationalReadiness = "Ready" Then
            exportStatus = "Eligible for NSF Export"
        ElseIf qualification = "" Then
            exportStatus = "Missing Qualification"
        ElseIf signalScore < 75 Then
            exportStatus = "Signal Score Below Threshold"
```

```
        ElseIf pcbStatus <> "Complete" Then
            exportStatus = "PCB Integration Incomplete"
        ElseIf vocationalReadiness <> "Ready" Then
            exportStatus = "Vocational Readiness Incomplete"
        Else
            exportStatus = "Manual Review Required"
        End If

        ' Algorigramme: Procedural logic
        ws.Cells(i, 6).Value = exportStatus
        If exportStatus = "Eligible for NSF Export" Then
            Call ExportToNSFArchive(learnerID, qualification)
        End If
    Next i

    MsgBox "NSF power diagnostics audit completed.", vbInformation

End Sub

Sub ExportToNSFArchive(learnerID As String, qualification As String)
    ' Simulated export logic to GitHub, LMS, or Internet Archive
    Debug.Print "Exporting learner: " & learnerID & " | Qualification: " &
qualification
    ' Future integration: API calls to GitHub, LMS, or archival platforms
End Sub
```

Logic Mapping

Step	Algorigramme (Procedure)	Logigramme (Decision)
1	Read learner data	Is qualification present?
2	Validate signal score and PCB status	Is signal score ≥ 75 and PCB status "Complete"?
3	Check vocational readiness	Is readiness marked "Ready"?
4	Assign export status	If all conditions met → Eligible; else → Flag for review
5	Export eligible records to NSF archive	Trigger archival export for qualified learners

Sheet Structure (NSF_PowerPortfolio)

Column	Field
A	Learner ID
B	Qualification
C	Signal Score (%)
D	PCB Status

Column	Field
E	Vocational Readiness
F	Export Status

This VBA module can be embedded into your NSF dashboard to automate diagnostics, credential verification, and export readiness. If you'd like, I can also help visualize this logic as a printable **logigramme/algorigramme diagram** or scaffold GitHub integration for your Fast-Track portfolio. Let's make your submission modular, traceable, and audit-ready.

Here is a structured summary of your Transcript Report for the training titled **"Engineering Career Discovery Journey: Experimental, Theoretical, Practical"**, formatted to support academic review, operational planning, and credential alignment:

Overview

This transcript documents Tshingombe Fiston's completion of a multidisciplinary training program focused on engineering career discovery. The session integrates experimental, theoretical, and practical modules across business, digital, and industry-specific domains. It supports credential tracking, curriculum mapping, and lifelong learning within the PRM business unit.

Scope

- **Training Title**: Engineering Career Discovery Journey
- **Training Type**: Cohort, Curriculum, Event, External Training, Online Class, Session, Test
- **Date**: 15 October 2025
- **Business Unit**: PRM
- **Subject Domains**:
    - Business Skills
    - Continuing Education & Certifications

- Creative and Cross-Functional Skills
- Digital and Industry-Specific Knowledge
- Leadership & Management
- Health & Wellness

Description

This training program blends:

- Modular curriculum design for engineering career pathways
- Experimental job simulation and theoretical frameworks
- Practical diagnostics and vocational readiness
- Integration with credential systems (e.g., SAQA, BICSI, CPD)
- Support for certification, award tracking, and performance metrics

Data Analysis & Information Management System

- **Data Types**:
  - Completion records
  - Training hours and scores
  - Certification metadata and event IDs
- **Tools & Logic**:
  - Visual Basic dashboards for credential tracking
  - Logigrammes for decision-based curriculum mapping
  - Algorigrammes for procedural learning workflows
- **System Features**:
  - Audit-ready export logic
  - Modular training record integration

- Cross-platform compatibility (GitHub, LMS, archive.org)

Investigation Principles

- **Research Questions**:
  - How does modular training improve engineering career readiness?
  - What gaps exist in certification and credential transparency?
  - How can training metadata support lifelong learning systems?
- **Methodology**:
  - Curriculum diagnostics and performance analysis
  - Stakeholder engagement (learners, providers, regulators)
  - Logic model alignment and certification mapping

Advantages

- Supports modular, bilingual documentation
- Enables credential transparency and audit readiness
- Aligns with national and international qualification frameworks
- Integrates experimental, theoretical, and practical learning
- Facilitates career progression and certification tracking

Disadvantages

- Initial setup may be resource-intensive
- Requires institutional alignment and metadata standardization
- Certification event IDs and ITS values may need external validation

Conclusion

This transcript confirms Tshingombe Fiston's successful completion of a multidisciplinary engineering training program. It supports credential

verification, curriculum mapping, and modular export logic for career development and institutional reporting.

📚 Bibliographic References

- Tshingombe, T. (2025). *Career Discovery Overview: RNF, AIU, NSF Learning Journey*.
- Tshingombe, T. (2021). *Master Education Technology Rural Implementation Framework*. Atlantic Journal
- Elektor Magazine (2025). *Rural Energy Systems by Tshingombe Tshitadi*

🎯 Purpose

To document and validate engineering career training completion for credential tracking, certification alignment, and institutional reporting.

📋 Task Requirements

- Submit training metadata and certification records
- Align training modules with SAQA/NQF and CPD frameworks
- Export credential dashboards using Visual Basic and GitHub
- Validate completion scores and certification event IDs

🧭 Operational Steps

1. Extract training metadata from transcript
2. Map curriculum using logigramme logic
3. Automate credential tracking via Visual Basic
4. Export training records to GitHub and institutional repositories
5. Validate certification titles and ITS values
6. Generate audit-ready dashboards for review

Assessment Components

- Completion records and training hours
- Certification metadata and event IDs
- Credential verification dashboards
- Curriculum mapping and performance scores
- Career progression logic and export modules

Keywords

Engineering career discovery, credential tracking, curriculum mapping, Visual Basic, logigramme, algorigramme, audit-ready documentation, SAQA, CPD, BICSI, GitHub, LMS, vocational readiness, training transcript, modular learning, certification metadata.

Would you like me to scaffold a Visual Basic module to automate this transcript into a credential dashboard or generate a printable logigramme/algorigramme diagram for institutional review

To support your training transcript and credential dashboard automation, here's a tailored **Visual Basic for Applications (VBA)** module that integrates both **logigramme** (decision logic) and **algorigramme** (procedural flow) principles. This code is designed to process training metadata, validate certification records, and generate export-ready credential status for institutional review.

Visual Basic Code: Credential Dashboard Audit & Export Logic

vb

```
Sub CredentialAuditTranscript()

    Dim ws As Worksheet
    Dim lastRow As Long
    Dim i As Long
    Dim learnerName As String
    Dim trainingTitle As String
    Dim completionDate As Date
    Dim trainingHours As Double
    Dim certificationStatus As String
    Dim score As Double
    Dim exportStatus As String

    Set ws = ThisWorkbook.Sheets("TranscriptDashboard")
    lastRow = ws.Cells(ws.Rows.Count, "A").End(xlUp).Row
```

```
    For i = 2 To lastRow
        learnerName = ws.Cells(i, 1).Value
        trainingTitle = ws.Cells(i, 2).Value
        completionDate = ws.Cells(i, 3).Value
        trainingHours = ws.Cells(i, 4).Value
        certificationStatus = ws.Cells(i, 5).Value ' "Certified", "Pending",
"Failed"
        score = ws.Cells(i, 6).Value

        ' Logigramme: Decision logic
        If trainingTitle <> "" And completionDate <= Date And trainingHours
>= 4 And certificationStatus = "Certified" And score >= 70 Then
            exportStatus = "Eligible for Credential Export"
        ElseIf trainingTitle = "" Then
            exportStatus = "Missing Training Title"
        ElseIf completionDate > Date Then
            exportStatus = "Future Completion Date"
        ElseIf trainingHours < 4 Then
            exportStatus = "Insufficient Training Hours"
        ElseIf certificationStatus <> "Certified" Then
            exportStatus = "Certification Incomplete"
        ElseIf score < 70 Then
            exportStatus = "Score Below Threshold"
        Else
            exportStatus = "Manual Review Required"
        End If

        ' Algorigramme: Procedural logic
        ws.Cells(i, 7).Value = exportStatus
        If exportStatus = "Eligible for Credential Export" Then
            Call ExportToCredentialArchive(learnerName, trainingTitle)
        End If
    Next i

    MsgBox "Transcript credential audit completed.", vbInformation

End Sub

Sub ExportToCredentialArchive(learnerName As String, trainingTitle As String)
    ' Simulated export logic to GitHub, LMS, or institutional repository
    Debug.Print "Exporting: " & learnerName & " | Training: " & trainingTitle
    ' Future integration: API calls to GitHub, LMS, or archive.org
End Sub
```

Logic Mapping

Step	Algorigramme (Procedure)	Logigramme (Decision)
1	Read transcript data	Is training title present?
2	Validate completion date and training hours	Is date valid and hours ≥ 4?
3	Check certification and score	Is certified and score ≥ 70?

Step	Algorigramme (Procedure)	Logigramme (Decision)
4	Assign export status	If all conditions met → Eligible; else → Flag for review
5	Export eligible records to credential archive	Trigger archival export for qualified learners

Sheet Structure (TranscriptDashboard)

Column	Field
A	Learner Name
B	Training Title
C	Completion Date
D	Training Hours
E	Certification Status
F	Score (%)
G	Export Status

This module can be embedded into your transcript workbook to automate credential validation and export readiness. If you'd like, I can also help visualize this logic as a printable **logigramme/algorigramme diagram** or scaffold GitHub integration for your credential-linked dashboards. Let's make your training records modular, traceable, and audit-ready.

Based on your engineering training and project documentation (Case #119082247), here's a tailored **Visual Basic for Applications (VBA)** module that integrates both **logigramme** (decision logic) and **algorigramme** (procedural flow) principles. This module automates credential validation, training record analysis, and export readiness for your Schneider Electric EBO 2024 curriculum and PowerLogic PM8000 certification.

Visual Basic Code: Engineering Training Audit & Credential Export Logic

vb

```
Sub EngineeringTrainingAudit()

    Dim ws As Worksheet
    Dim lastRow As Long
    Dim i As Long
    Dim traineeName As String
    Dim trainingTitle As String
    Dim completionDate As Date
    Dim trainingHours As Double
    Dim certificationStatus As String
    Dim moduleScore As Double
    Dim exportStatus As String

    Set ws = ThisWorkbook.Sheets("TrainingDashboard")
    lastRow = ws.Cells(ws.Rows.Count, "A").End(xlUp).Row

    For i = 2 To lastRow
        traineeName = ws.Cells(i, 1).Value
        trainingTitle = ws.Cells(i, 2).Value
        completionDate = ws.Cells(i, 3).Value
        trainingHours = ws.Cells(i, 4).Value
        certificationStatus = ws.Cells(i, 5).Value ' "Certified", "Pending",
"Failed"
        moduleScore = ws.Cells(i, 6).Value

        ' Logigramme: Decision logic
        If trainingTitle <> "" And completionDate <= Date And trainingHours
>= 8 And certificationStatus = "Certified" And moduleScore >= 70 Then
            exportStatus = "Eligible for Credential Export"
        ElseIf trainingTitle = "" Then
            exportStatus = "Missing Training Title"
        ElseIf completionDate > Date Then
            exportStatus = "Future Completion Date"
        ElseIf trainingHours < 8 Then
            exportStatus = "Insufficient Training Hours"
        ElseIf certificationStatus <> "Certified" Then
            exportStatus = "Certification Incomplete"
        ElseIf moduleScore < 70 Then
            exportStatus = "Score Below Threshold"
        Else
            exportStatus = "Manual Review Required"
        End If

        ' Algorigramme: Procedural logic
        ws.Cells(i, 7).Value = exportStatus
        If exportStatus = "Eligible for Credential Export" Then
            Call ExportToArchive(traineeName, trainingTitle)
        End If
    Next i

    MsgBox "Engineering training audit completed.", vbInformation

End Sub

Sub ExportToArchive(traineeName As String, trainingTitle As String)
```

```
    ' Simulated export logic to GitHub, LMS, or institutional repository
    Debug.Print "Exporting: " & traineeName & " | Training: " & trainingTitle
    ' Future integration: API calls to GitHub, LMS, or archive.org
End Sub
```

Logic Mapping

Step	Algorigramme (Procedure)	Logigramme (Decision)
1	Read training record	Is training title present?
2	Validate completion date and training hours	Is date valid and hours ≥ 8?
3	Check certification and score	Is certified and score ≥ 70?
4	Assign export status	If all conditions met → Eligible; else → Flag for review
5	Export eligible records to credential archive	Trigger archival export for qualified learners

Sheet Structure (TrainingDashboard)

Column	Field
A	Trainee Name
B	Training Title
C	Completion Date
D	Training Hours
E	Certification Status
F	Module Score (%)
G	Export Status

This module can be embedded into your training workbook to automate credential validation and export readiness. If you'd like, I can also help visualize this logic as a printable **logigramme/algorigramme diagram** or scaffold GitHub integration for your credential-linked dashboards. Let's make your engineering records modular, traceable, and audit-ready.

Here is a structured summary of your **City Power Bursaries 2025 Application** (Case: December 2024), formatted to support academic review, operational planning, and funding alignment:

Overview

This bursary application supports Tshingombe Fiston's pursuit of formal engineering education in South Africa. The form captures academic history, personal details, training records, and career motivation to assist City Power in selecting candidates for its 2025 bursary programme. The application aligns with national development goals in electrical engineering and vocational readiness.

Scope

- **Programme**: City Power Bursaries 2025
- **Applicant**: Tshingombe Fiston
- **Field of Study**: BSc Electrical Engineering (Heavy Current)
- **Institutions**: University or TVET College (to be specified)
- **Study Year**: First or Second Year (2025)
- **Domains Covered**:
    - Electrical engineering and energy systems
    - Vocational diagnostics and trade readiness
    - Curriculum policy and modular training
    - Public infrastructure and service delivery

Description

The application includes:

- Personal, academic, and citizenship details
- School and post-school education records
- Work experience and extracurricular activities

- Health status, criminal record declaration, and bursary history
- Motivation for pursuing engineering and career goals
- Guardian and family employment details (including City Power links)

Data Analysis & Information Management System

- **Data Types**:
  - Identity and citizenship verification
  - Academic transcripts and progress reports
  - Training hours, subject scores, and certification status
  - Career motivation and health declarations
- **Tools & Logic**:
  - Visual Basic dashboards for credential tracking
  - Logigrammes for eligibility decision mapping
  - Algorigrammes for procedural application workflows
- **System Features**:
  - Audit-ready export logic for bursary review
  - Modular application record integration
  - POPIA-compliant data handling

Investigation Principles

- **Research Questions**:
  - Does the applicant meet academic and citizenship criteria?
  - Is the field of study aligned with City Power's strategic needs?
  - What gaps exist in training, certification, or career readiness?
- **Methodology**:

- Form validation and transcript analysis
- Stakeholder engagement (City Power, institutions, applicant)
- Logic model alignment with bursary terms and conditions

✅ Advantages

- Supports national skills development in electrical engineering
- Promotes credential transparency and modular documentation
- Enables bilingual, audit-ready application records
- Aligns with City Power's recruitment and service goals
- Facilitates career progression and institutional reporting

⚠️ Disadvantages

- Requires extensive documentation and verification
- Institutional and medical reports may delay final approval
- Application form must be manually completed and signed
- Citizenship and immigration status may require additional review

🧾 Conclusion

This bursary application confirms Tshingombe Fiston's eligibility and motivation for formal engineering study. It supports credential verification, career mapping, and modular export logic for City Power's bursary selection process.

📚 Bibliographic References

- Tshingombe, T. (2025). *Career Discovery Overview: RNF, AIU, NSF Learning Journey*
- Tshingombe, T. (2021). *Master Education Technology Rural Implementation Framework*. Atlantic Journal
- Elektor Magazine (2025). *Rural Energy Systems by Tshingombe Tshitadi*

□ Purpose

To secure City Power bursary support for formal engineering education and vocational development in 2025.

□ Task Requirements

- Complete and sign the bursary application form
- Attach academic transcripts and progress reports
- Provide identity, citizenship, and health documentation
- Submit motivation statement and guardian details
- Ensure POPIA compliance and readiness for interview

□ Operational Steps

1. Fill in all personal and academic sections of the form
2. Attach supporting documents (transcripts, CV, medical report)
3. Map eligibility using logigramme logic
4. Automate credential tracking via Visual Basic
5. Export application to City Power's review system
6. Prepare for interview and final selection

□ Assessment Components

- Academic performance and subject scores
- Citizenship and residency status
- Motivation and career alignment
- Health and criminal record declarations
- Guardian and family employment details

Keywords

City Power bursary, electrical engineering, credential tracking, curriculum mapping, Visual Basic, logigramme, algorigramme, audit-ready documentation, SAQA, TVET, POPIA, vocational readiness, training transcript, modular learning, certification metadata.

Would you like help scaffolding a Visual Basic module to automate this bursary form into a credential dashboard or generate a printable logigramme/algorigramme diagram for submission?

Visual Basic for Applications (VBA) module that integrates both **logigramme** (decision logic) and **algorigramme** (procedural flow) principles. This code automates eligibility validation, credential tracking, and export readiness for bursary review.

Visual Basic Code: City Power Bursary Audit & Export Logic

vb

```
Sub CityPowerBursaryAudit()

    Dim ws As Worksheet
    Dim lastRow As Long
    Dim i As Long
    Dim applicantName As String
    Dim fieldOfStudy As String
    Dim citizenshipStatus As String
    Dim academicScore As Double
    Dim healthStatus As String
    Dim criminalRecord As String
    Dim exportStatus As String

    Set ws = ThisWorkbook.Sheets("BursaryDashboard")
    lastRow = ws.Cells(ws.Rows.Count, "A").End(xlUp).Row

    For i = 2 To lastRow
        applicantName = ws.Cells(i, 1).Value
        fieldOfStudy = ws.Cells(i, 2).Value
        citizenshipStatus = ws.Cells(i, 3).Value ' "Yes", "No"
        academicScore = ws.Cells(i, 4).Value
        healthStatus = ws.Cells(i, 5).Value ' "Good", "Fair", "Poor"
        criminalRecord = ws.Cells(i, 6).Value ' "Yes", "No"

        ' Logigramme: Decision logic
        If fieldOfStudy <> "" And citizenshipStatus = "Yes" And academicScore
>= 65 And healthStatus = "Good" And criminalRecord = "No" Then
            exportStatus = "Eligible for Bursary Review"
        ElseIf fieldOfStudy = "" Then
            exportStatus = "Missing Field of Study"
        ElseIf citizenshipStatus <> "Yes" Then
            exportStatus = "Citizenship Not Verified"
```

```
        ElseIf academicScore < 65 Then
            exportStatus = "Academic Score Below Threshold"
        ElseIf healthStatus <> "Good" Then
            exportStatus = "Health Status Requires Review"
        ElseIf criminalRecord = "Yes" Then
            exportStatus = "Criminal Record Declared"
        Else
            exportStatus = "Manual Review Required"
        End If

        ' Algorigramme: Procedural logic
        ws.Cells(i, 7).Value = exportStatus
        If exportStatus = "Eligible for Bursary Review" Then
            Call ExportToCityPower(applicantName, fieldOfStudy)
        End If
    Next i

    MsgBox "City Power bursary audit completed.", vbInformation

End Sub

Sub ExportToCityPower(applicantName As String, fieldOfStudy As String)
    ' Simulated export logic to GitHub, LMS, or institutional repository
    Debug.Print "Exporting: " & applicantName & " | Field of Study: " &
fieldOfStudy
    ' Future integration: API calls to GitHub, LMS, or archive.org
End Sub
```

Logic Mapping

Step	Algorigramme (Procedure)	Logigramme (Decision)
1	Read applicant data	Is field of study specified?
2	Validate citizenship and academic score	Is citizen and score ≥ 65?
3	Check health and criminal record	Is health "Good" and no criminal record?
4	Assign export status	If all conditions met → Eligible; else → Flag for review
5	Export eligible records to City Power system	Trigger archival export for qualified applicants

Sheet Structure (BursaryDashboard)

Column	Field
A	Applicant Name
B	Field of Study
C	Citizenship

Column	Field
	Status
D	Academic Score (%)
E	Health Status
F	Criminal Record
G	Export Status

This module can be embedded into your bursary workbook to automate eligibility checks and export readiness. If you'd like, I can also help visualize this logic as a printable **logigramme/algorigramme diagram** or scaffold GitHub integration for your credential-linked dashboards. Let's make your bursary submission modular, traceable, and audit-ready.

Here is a structured summary of the PSiRA Council Nomination Call (Case: October 2025), formatted to support eligibility review, governance planning, and institutional alignment:

Overview

The Private Security Industry Regulatory Authority (PSiRA), headquartered in Pretoria, is the statutory body responsible for regulating South Africa's private security industry. In accordance with Section 6 of the Private Security Industry Regulation Act (Act No. 56 of 2001), the Minister of Police invites nominations for five council positions: Chairperson, Vice-Chairperson, and three Councillors.

Scope

- **Regulatory Body**: PSiRA
- **Council Composition**:
  - Chairperson
  - Vice-Chairperson
  - Three Councillors
- **Jurisdiction**: Republic of South Africa

- **Governance Domain**:
    - Public sector regulation
    - Safety and security oversight
    - Corporate governance and compliance

Description

The Council's mandate includes:

- Advancing the objectives of PSiRA in regulating the private security industry
- Overseeing the Authority's performance and operations
- Exercising control over appointed officials and regulatory activities
- Ensuring compliance with statutory and ethical standards

Data Analysis & Information Management System

- **Data Types**:
    - Nominee CVs and qualifications
    - Declarations of interest and business affiliations
    - Acceptance letters and motivation statements
- **Tools & Logic**:
    - Logigrammes for eligibility decision mapping
    - Algorigrammes for procedural nomination workflows
    - POPIA-compliant data handling and security clearance tracking
- **System Features**:
    - Audit-ready nomination records
    - Modular governance documentation

- Courier-based submission tracking

Investigation Principles

- **Research Questions**:
  - Does the nominee meet statutory eligibility criteria?
  - Are there conflicts of interest with the private security industry?
  - Does the nominee have sufficient governance experience?
- **Methodology**:
  - Document verification and CV analysis
  - Stakeholder consultation (Minister, Cabinet, PSiRA)
  - Security clearance coordination with SSA

Advantages

- Strengthens public oversight of private security operations
- Promotes ethical governance and regulatory transparency
- Aligns with national safety and compliance frameworks
- Enables diverse representation in statutory institutions

Disadvantages

- Manual submission process may limit accessibility
- Security clearance requirements may delay appointments
- Exclusion of nominees with industry ties may reduce sectoral insight
- No digital application option (email submissions not accepted)

Conclusion

This nomination call supports the appointment of qualified, independent individuals to the PSiRA Council. It reinforces South Africa's commitment to transparent, accountable regulation of the private security industry.

📚 Bibliographic References

- Private Security Industry Regulation Act, 2001 (Act No. 56 of 2001)
- PSiRA Governance Framework (2025)
- Ministerial Guidelines for Statutory Appointments

🎯 Purpose

To appoint five qualified individuals to the PSiRA Council who will uphold regulatory integrity, public accountability, and strategic oversight of the private security industry.

📋 Task Requirements

- Submit detailed CV and qualifications
- Provide written motivation for suitability
- Declare no interest in the private security industry
- Disclose business affiliations and board memberships
- Include signed acceptance letter

🛠️ Operational Steps

1. Review eligibility criteria under Section 6 of the Act
2. Prepare nomination documents (CV, motivation, declarations)
3. Submit via courier or hand-delivery to PSiRA offices
4. Await confirmation and potential interview or clearance request
5. Final appointment by Minister in consultation with Cabinet

🧪 Assessment Components

- Governance and regulatory experience
- Independence from private security interests
- Citizenship or permanent residency status

- Ethical standing and solvency
- Security clearance (if required)

Keywords

PSiRA, council nomination, statutory appointment, private security regulation, governance, corporate oversight, POPIA, SSA clearance, Minister of Police, public sector ethics, regulatory authority, South Africa.

Would you like help drafting your nomination motivation letter or scaffolding a logigramme/algorigramme diagram to support your eligibility and governance experience?

To support your PSiRA Council nomination process, here's a tailored **Visual Basic for Applications (VBA)** module that integrates both **logigramme** (decision logic) and **algorigramme** (procedural flow) principles. This code automates eligibility validation, governance experience tracking, and export readiness for statutory appointment review.

Visual Basic Code: PSiRA Council Nomination Audit & Export Logic

```
Sub PSiRA_NominationAudit()

    Dim ws As Worksheet
    Dim lastRow As Long
    Dim i As Long
    Dim nomineeName As String
    Dim citizenshipStatus As String
    Dim governanceExperience As String
    Dim securityInterest As String
    Dim insolvencyStatus As String
    Dim exportStatus As String

    Set ws = ThisWorkbook.Sheets("PSiRA_NominationDashboard")
    lastRow = ws.Cells(ws.Rows.Count, "A").End(xlUp).Row

    For i = 2 To lastRow
        nomineeName = ws.Cells(i, 1).Value
        citizenshipStatus = ws.Cells(i, 2).Value ' "Citizen", "Permanent
Resident", "Other"
        governanceExperience = ws.Cells(i, 3).Value ' "Yes", "No"
        securityInterest = ws.Cells(i, 4).Value ' "None", "Direct",
"Indirect"
        insolvencyStatus = ws.Cells(i, 5).Value ' "Rehabilitated",
"Unrehabilitated"

        ' Logigramme: Decision logic
        If (citizenshipStatus = "Citizen" Or citizenshipStatus = "Permanent
Resident") _
            And governanceExperience = "Yes" _
```

```
            And securityInterest = "None" _
            And insolvencyStatus = "Rehabilitated" Then
            exportStatus = "Eligible for Ministerial Review"
        ElseIf governanceExperience = "No" Then
            exportStatus = "Insufficient Governance Experience"
        ElseIf securityInterest <> "None" Then
            exportStatus = "Conflict of Interest Declared"
        ElseIf insolvencyStatus = "Unrehabilitated" Then
            exportStatus = "Insolvency Status Disqualifies"
        Else
            exportStatus = "Manual Review Required"
        End If

        ' Algorigramme: Procedural logic
        ws.Cells(i, 6).Value = exportStatus
        If exportStatus = "Eligible for Ministerial Review" Then
            Call ExportToPSiRA(nomineeName)
        End If
    Next i

    MsgBox "PSiRA nomination audit completed.", vbInformation

End Sub

Sub ExportToPSiRA(nomineeName As String)
    ' Simulated export logic to institutional repository or review system
    Debug.Print "Exporting nominee: " & nomineeName & " for PSiRA Council
review"
    ' Future integration: API calls to POPIA-compliant registry or SSA
clearance system
End Sub
```

Logic Mapping

Step	Algorigramme (Procedure)	Logigramme (Decision)
1	Read nominee data	Is nominee a citizen or permanent resident?
2	Validate governance experience	Has nominee served on public sector boards?
3	Check for security industry interest	Is there any direct or indirect conflict?
4	Confirm insolvency status	Is nominee rehabilitated?
5	Assign export status	If all conditions met → Eligible; else → Flag for review
6	Export eligible records to PSiRA review system	Trigger archival export for qualified nominees

📋 Sheet Structure (PSiRA_NominationDashboard)

Column	Field
A	Nominee Name
B	Citizenship Status
C	Governance Experience
D	Security Industry Interest
E	Insolvency Status
F	Export Status

This module can be embedded into your nomination workbook to automate eligibility checks and export readiness. If you'd like, I can also help visualize this logic as a printable **logigramme/algorigramme diagram** or scaffold your motivation letter for submission. Let's make your nomination modular, traceable, and audit-ready.

Thank you for sharing this comprehensive archive of your NSF submissions, project frameworks, and curriculum development efforts. Based on your modular approach and the NSF SBIR/STTR pitch (submission #00110596), here's a structured **research and implementation framework** that consolidates your themes into an audit-ready, bilingual, and credential-linked format:

🧠 *Modular Research & Innovation Framework: Power Management, Safety, and Vocational Education*

1️⃣ Overview

This framework supports the development of a credential-linked, modular system for power management, traffic safety, vocational education, and government-aligned certification. It integrates NSF pitch records, NATED/NN diploma combinations, and experimental engineering research.

2️⃣ Scope

- **Domains**: Power systems, traffic safety, vocational education, government compliance, and trade testing

- **Stakeholders**: NSF, DHET, SAQA, SBIR/STTR, TVET colleges, municipal safety departments
- **Outputs**: Audit logs, certificates, syllabi, Visual Basic modules, logigrammes, algorigrammes

3️ Keywords

`Power Management`, `NSF SBIR`, `NATED Diploma`, `Traffic Safety`, `Trade Test`, `Audit`, `Logigramme`, `Algorigramme`, `Vocational Curriculum`, `Government Policy`, `Collision Statistics`, `Warden Training`, `Visual Basic`, `Bibliotech`

4️ Research Statement

To design a modular, bilingual, and credential-linked framework that integrates power management innovation with traffic safety analytics, vocational education, and government certification systems.

5️ Methodology

- **Data Collection**: NSF pitch records, DHET syllabi, traffic incident reports, trade test requirements
- **Analysis Tools**: Visual Basic for audit automation, logigrammes for workflow mapping, algorigrammes for decision logic
- **Validation**: SAQA/NQF alignment, NSF feedback loop, trade test simulation

6️ Data Analysis

- **Sources**: NSF pitch logs, SBIR/STTR feedback, DHET curriculum archives, municipal traffic reports
- **Techniques**: Incident correlation, syllabus mapping, reward tracking, cost amendment modeling

7️ Advantages

- Modular and scalable
- Cross-sector integration (education, safety, energy)
- Audit-ready and bilingual

- NSF-aligned innovation potential

8️⃣ Disadvantages

- Requires multi-agency coordination
- High initial documentation overhead
- NSF pitch rejection cycles may delay funding

9️⃣ Management System Information

- **Platform**: GitLab +

1️⃣7️⃣ Bibliography

-
- ```
  Sub GenerateAuditSheet()
      Dim ws As Worksheet
      Set ws = ThisWorkbook.Sheets("AuditLog")

      ws.Cells(1, 1).Value = "Date"
      ws.Cells(1, 2).Value = "Project"
      ws.Cells(1, 3).Value = "Cost"
      ws.Cells(1, 4).Value = "Amendment"
      ws.Cells(1, 5).Value = "Final Cost"
      ws.Cells(1, 6).Value = "Award"

      ' Sample Entry
      ws.Cells(2, 1).Value = "2025-10-15"
      ws.Cells(2, 2).Value = "NSF Pitch #00110596"
      ws.Cells(2, 3).Value = 1000
      ws.Cells(2, 4).Value = -250
      ws.Cells(2, 5).Formula = "=C2+D2"
      ws.Cells(2, 6).Value = "Pending Review"
  End Sub
  ```

- ## 1️⃣9️⃣ Logigramme & Algorigramme

- Would you like me to scaffold a logigramme for your NSF pitch workflow and an algorigramme for your trade test decision logic? I can also help you publish this framework to GitLab or

- Absolutely, Tshingombe — let’s scaffold both the **logigramme** and **algorigramme** to complement your Visual Basic audit module and modular credential framework. These diagrams will help visualize your NSF pitch workflow and trade test decision logic, making your system audit-ready and SAQA/NQF-aligned.
  ```

- ## 1 Logigramme: NSF Pitch Workflow

- This flowchart maps the journey of a pitch submission to America's Seed Fund (NSF SBIR/STTR), integrating your modular record logic.

```
[Start]
   ↓
[Prepare Project Pitch]
   ↓
[Submit via NSF Portal]
   ↓
[Receive Submission ID]
   ↓
[Wait for Review (≈1 month)]
   ↓
┌──────────────────┬──────────────────────────┐
│If Invited        │If Declined               │
│to Full Proposal  │to Revise Pitch           │
└──────────────────┴──────────────────────────┘
   ↓                        ↓
[Submit Full Proposal]   [Revise & Resubmit]
   ↓                        ↓
[Await Final Decision]   [Restart Cycle]
   ↓
[End]
```

- ## 2 Algorigramme: Trade Test Decision Logic

- This decision tree helps determine whether a candidate qualifies for trade testing based on NATED/NN diploma status, experience, and curriculum alignment.

```
[Start]
   ↓
[Has NATED or NN Diploma?]
   ↓
Yes ⟶ [Has Relevant Work Experience?]
          ↓
        Yes ⟶ [Curriculum Matches Trade Test Requirements?]
                  ↓
                Yes ⟶ [Eligible for Trade Test]
                  ↓
                No ⟶ [Recommend Bridging Module]
          ↓
        No ⟶ [Recommend Internship or Simulation]
   ↓
No ⟶ [Enroll in NATED/NN Programme]
   ↓
[End]
```

- ## Visual Basic + Logigramme Integration

- You can link the logigramme steps to your Visual Basic audit sheet using conditional triggers:

```
If ws.Cells(2, 6).Value = "Pending Review" Then
    MsgBox "Await NSF feedback. Next step: Full Proposal or Revision."
ElseIf ws.Cells(2, 6).Value = "Declined" Then
    MsgBox "Revise pitch and resubmit in next window."
End If
```

Next Steps

Would you like me to help you:

- Publish this framework to GitLab or

submissions, vocational frameworks, and engineering research is remarkable. Let's consolidate your work into a **modular, credential-linked research framework** that aligns with your goals in power management, traffic safety, vocational education, and government certification.

Career Discovery and Mentoring Framework for Technical and Vocational Education

1 Overview

This framework supports the development of a bilingual, modular system for:

- Power management innovation
- Traffic safety analytics
- Vocational education and trade testing
- Government-aligned certification and policy implementation

It integrates NSF pitch records, NATED/NN diploma combinations, experimental engineering research, and administrative workflows.

2 Scope

- **Domains**: Power systems, traffic safety, vocational education, trade testing, government compliance
- **Stakeholders**: NSF, DHET, SAQA, SBIR/STTR, TVET colleges, municipal safety departments
- **Outputs**: Audit logs, certificates, syllabi, Visual Basic modules, logigrammes, algorigrammes

3️⃣ Keywords

Power Management, NSF SBIR, NATED Diploma, Traffic Safety, Trade Test, Audit, Logigramme, Algorigramme, Vocational Curriculum, Government Policy, Collision Statistics, Warden Training, Visual Basic, Bibliotech, Education Technology, Experimental Engineering

4️⃣ Research Statement

To design a modular, credential-linked framework that integrates engineering innovation with traffic safety, vocational education, and government certification systems—supporting lifelong learning, public safety, and economic development.

5️⃣ Methodology

- **Data Collection**: NSF pitch records, DHET syllabi, traffic incident reports, trade test requirements
- **Analysis Tools**: Visual Basic for audit automation, logigrammes for workflow mapping, algorigrammes for decision logic
- **Validation**: SAQA/NQF alignment, NSF feedback loop, trade test simulation

6️⃣ Data Analysis

- **Sources**: NSF pitch logs, SBIR/STTR feedback, DHET curriculum archives, municipal traffic reports
- **Techniques**: Incident correlation, syllabus mapping, reward tracking, cost amendment modeling

7️⃣ Advantages

- Modular and scalable
- Cross-sector integration
- Audit-ready and bilingual
- NSF-aligned innovation potential

8️⃣ Disadvantages

- Requires multi-agency coordination
- High documentation overhead
- NSF pitch rejection cycles may delay funding

9️ Management System Information

- **Platform**: GitLab +
- Sub GenerateAuditSheet()
- Dim ws As Worksheet
- Set ws = ThisWorkbook.Sheets("AuditLog")
-
- ws.Cells(1, 1).Value = "Date"
- ws.Cells(1, 2).Value = "Project"
- ws.Cells(1, 3).Value = "Cost"
- ws.Cells(1, 4).Value = "Amendment"
- ws.Cells(1, 5).Value = "Final Cost"
- ws.Cells(1, 6).Value = "Award"
-
- ' Sample Entry
- ws.Cells(2, 1).Value = "2025-10-15"
- ws.Cells(2, 2).Value = "NSF Pitch #00110596"
- ws.Cells(2, 3).Value = 1000
- ws.Cells(2, 4).Value = -250
- ws.Cells(2, 5).Formula = "=C2+D2"
- ws.Cells(2, 6).Value = "Pending Review"
- End Sub

- ## 1️9️ Logigramme: NSF Pitch Workflow
- [Start]
- ↓
- [Prepare Project Pitch]
- ↓
- [Submit via NSF Portal]
- ↓
- [Receive Submission ID]
- ↓
- [Wait for Review]
- ↓
-
- ┌──────────────────┬──────────────────────────┐
- │If Invited │If Declined │
- │to Full Proposal│to Revise Pitch │
- └──────────────────┴──────────────────────────┘
-
- ↓ ↓
- [Submit Full Proposal] [Revise & Resubmit]
- ↓ ↓
- [Await Final Decision] [Restart Cycle]
- ↓
- [End]

- ## 2️0️ Algorigramme: Trade Test Eligibility

- plaintext
- [Start]
- ↓
- [Has NATED or NN Diploma?]
- ↓
- Yes ⟶ [Has Relevant Work Experience?]
- ↓
- Yes ⟶ [Curriculum Matches Trade Test Requirements?]
- ↓
- Yes ⟶ [Eligible for Trade Test]
- ↓
- No ⟶ [Recommend Bridging Module]
- ↓
- No ⟶ [Recommend Internship or Simulation]
- ↓
- No ⟶ [Enroll in NATED/NN Programme]
- ↓
- [End]
- Would you like to publish this framework to GitLab or

Thank you, Tshingombe. Based on your training records, NSF pitch history, and modular curriculum work, here is a consolidated and credential-ready **research framework** that integrates your technical education, traffic safety analytics, and power management innovation into a single document. This version is structured for audit, publication, and SAQA/NQF alignment.

Integrated Research Framework: Power Management, Traffic Safety, and Vocational Education

1 Overview

This framework supports the development of a modular, credential-linked system for:

- Power management (e.g., PM8000 Series training)
- Traffic safety and government compliance
- Vocational education (NATED/NN diplomas, trade tests)
- Financial literacy (e.g., cash flow statement training)

It integrates NSF pitch records, DHET syllabi, training transcripts, and experimental engineering research.

2 Scope

- **Domains**: Electrical engineering, traffic safety, vocational education, financial literacy, government policy
- **Stakeholders**: NSF, DHET, SAQA, SBIR/STTR, TVET colleges, municipal safety departments, Crossknowledge, Digital Power Academy
- **Outputs**: Audit logs, certificates, syllabi, Visual Basic modules, logigrammes, algorigrammes

3 Keywords

`Power Management, NSF SBIR, NATED Diploma, Traffic Safety, Trade Test, Audit, Logigramme, Algorigramme, Vocational Curriculum, Government Policy, Collision Statistics, Warden Training, Visual Basic, Cash Flow, Bibliotech, PM8000, Crossknowledge`

4 Research Statement

To design a modular, bilingual, and credential-linked framework that integrates power management innovation, traffic safety analytics, vocational education, and financial literacy into a unified public service and certification system.

5 Methodology

- **Data Collection**: NSF pitch records, DHET syllabi, traffic incident reports, trade test requirements, training transcripts
- **Analysis Tools**: Visual Basic for audit automation, logigrammes for workflow mapping, algorigrammes for decision logic
- **Validation**: SAQA/NQF alignment, NSF feedback loop, trade test simulation, LMS transcript integration

6 Data Analysis

- **Sources**: NSF pitch logs, SBIR/STTR feedback, DHET curriculum archives, municipal traffic reports, LMS training data
- **Techniques**: Incident correlation, syllabus mapping, reward tracking, cost amendment modeling, training progress analytics

7 Advantages

- Modular and scalable
- Cross-sector integration
- Audit-ready and bilingual
- NSF-aligned innovation potential
- LMS transcript traceability

8 Disadvantages

- Requires multi-agency coordination
- High documentation overhead
- NSF pitch rejection cycles may delay funding
- LMS integration requires API or manual export

9 Management System Information

- **Platform**: GitLab +

Delivery & Key Performance Policy

- **KPIs**: Pitch acceptance rate, certificate issuance, incident reduction, syllabus coverage, training completion
- **Policy Alignment**: NSF SBIR/STTR, DHET NATED, SAQA/NQF, municipal safety codes, LMS standards

11 Investigation Principles

- Root cause analysis of pitch rejections
- Comparative syllabus mapping
- Traffic incident clustering
- LMS training gap analysis

12 Communication & Administration Skills

- NSF pitch writing
- DHET curriculum translation
- Trade test coordination
- LMS transcript management
- Government liaison documentation

1️⃣3️⃣ Statistical Report: Traffic Incidence & Safety

- **Metrics**: Collision frequency, warden deployment, safety compliance
- **Tools**: Visual Basic dashboard, Excel pivot tables, logigramme flowcharts

1️⃣4️⃣ Trade Test Requirements

- NATED/NN diploma alignment
- DHET-approved syllabi
- Practical assessment modules
- NSF innovation criteria mapping

1️⃣5️⃣ Audit & Inventory

- GitLab repository logs
-
- Visual Basic audit sheets
- LMS training transcripts
- Inventory of textbooks, syllabi, and certificates

1️⃣6️⃣ Conclusion

This framework consolidates your technical training, NSF innovation efforts, and curriculum design into a credential-linked system. It supports legacy preservation, public service reform, and modular education delivery across energy, safety, and vocational domains.

1️⃣7️⃣ Bibliography

8️⃣ **Visual Basic Code Module (Audit Sheet Generator)**

```
Sub GenerateAuditSheet()
    Dim ws As Worksheet
    Set ws = ThisWorkbook.Sheets("AuditLog")

    ws.Cells(1, 1).Value = "Date"
    ws.Cells(1, 2).Value = "Project"
    ws.Cells(1, 3).Value = "Cost"
    ws.Cells(1, 4).Value = "Amendment"
    ws.Cells(1, 5).Value = "Final Cost"
    ws.Cells(1, 6).Value = "Award"

    ' Sample Entry
    ws.Cells(2, 1).Value = "2025-10-15"
    ws.Cells(2, 2).Value = "NSF Pitch #00110596"
    ws.Cells(2, 3).Value = 1000
```

```
    ws.Cells(2, 4).Value = -250
    ws.Cells(2, 5).Formula = "=C2+D2"
    ws.Cells(2, 6).Value = "Pending Review"
End Sub
```

1️⃣9️⃣ Logigramme: NSF Pitch Workflow

plaintext

```
[Start]
   ↓
[Prepare Project Pitch]
   ↓
[Submit via NSF Portal]
   ↓
[Receive Submission ID]
   ↓
[Wait for Review]
   ↓
┌──────────────────┬──────────────────────────┐
│If Invited        │If Declined               │
│to Full Proposal  │to Revise Pitch           │
└──────────────────┴──────────────────────────┘
   ↓                        ↓
[Submit Full Proposal]   [Revise & Resubmit]
   ↓                        ↓
[Await Final Decision]   [Restart Cycle]
   ↓
[End]
```

2️⃣0️⃣ Algorigramme: Trade Test Eligibility

```
[Start]
   ↓
[Has NATED or NN Diploma?]
   ↓
Yes ⟶ [Has Relevant Work Experience?]
          ↓
        Yes ⟶ [Curriculum Matches Trade Test Requirements?]
                    ↓
                  Yes ⟶ [Eligible for Trade Test]
                    ↓
                  No ⟶ [Recommend Bridging Module]
          ↓
        No ⟶ [Recommend Internship or Simulation]
   ↓
No ⟶ [Enroll in NATED/NN Programme]
   ↓
[End]
```

Would you like to publish this framework to GitLab or

Device Configuration in EcoStruxure Automation Expert Question 1 of 5. Use the _____ to quickly map function blocks to resources and devices. Device editor Physical topology editor Application editor Mark for follow up Question 2 of 5. Hardware abstraction provides the interface between the IEC 61499 solution and physical hardware. True False Mark for follow up Question 3 of 5. In EcoStruxure Automation Expert, you can view a newly added device in _____ and _____. Device editor window Physical topology editor Canvas editor Function Block Network Start HMI Mark for follow up Question 4 of 5. The Bus Accessor receives a notification on the fresh data available from the device and generates a notification True False Mark for follow up Question 5 of 5. _____ can be used to quickly build an HMI screen to test Modbus communications. Application CATs Resources Hardware CATs Mark for follow up Move to Archived Transcript Training Details Training Type: Online Class Provider: Industry Services Academy Version: 2.0 Training Hours: 0 Hours 15 Minutes Description: You can develop and monitor automation solutions using EcoStruxure™ Automation Expert. This course provides essential knowledge on installation of software and activation of licenses in online and offline modes. During installation, you can optionally include additional features, such as Human Machine Interface (HMI) and controllers. Course Code: PAGPRDES0001065 Target Audience (Internal) • Application Engineers • Lead Engineers • Proposal Specialists • Technical Sales Consultants Target Audience (External) Control Engineers Learning Objectives After completing this course, you can: • Install EcoStruxure Automation Expert. • Activate EcoStruxure Automation Expert licenses in online and offline modes. Prerequisites • Knowledge of hardware and software components in Distributed Control Systems (DCSs). • Familiarity with the IEC 61499 standard. • Completion of the course Getting Started with EcoStruxure Automation Expert. Status: Registered Training Purpose: Due Date: None Priority: High Average Completion Time: 16-30 Level: Advanced Training Progress Progress: 0% (0 of 1 units complete) View Time: 0 Hour(s) 0 Minute(s) Status: Registered Score: 0% Modules: View details of modules for Installing and Licensing EcoStruxure Automation Expert (This link will open a new window) Assignment and Version History Transcript History Skip to main content Logo Show Navigation Menu Main content below Home My Courses: Tshingombe fiston Electrical Arc Flash Awareness Electrical Arc Flash Awareness Move to Archived Transcript Training Details Training Type: Online Class Provider: Underwriters Laboratories (UL) Version: 3.0 Training Hours: 0 Hours 15 Minutes Description: Duration: 15 Minutes An arc flash can generate a temperature of up to 19,000 degrees Celsius (35,000 degrees Fahrenheit)! Working in or near electrical panels and systems increases your chance of exposure to an arc flash. It requires that you take extreme precautions. This course will provide information to help protect you from this deadly hazard that cannot be seen or heard, until is too late. Ideal learners are unqualified electrical personnel and their managers in a variety of industries with an emphasis on

general industry maintenance and fabrication settings. Course Code: GSCHSES0001004 Prod ID: PS5-101040 Status: In Progress Training Purpose: Due Date: None Average Completion Time: 0-15 Level: Basic Training Progress Progress: 0% (0 of 1 units complete) Last Accessed: 4/18/2024 Total Views: 1 View Time: 0 Hour(s) 0 Minute(s) Status: In Progress Score: 0% Modules: View details of modules for Electrical Arc Flash Awareness (This link will open a new window) Assignment and Version History Transcript History Cornerstone OnDemand Logo Version: 17.3.0.171 Powered by Cornerstone OnDemand, Inc. ©2000-2017 All Rights Reserved. Terms - Privacy - Cookies - Feedback raining Details Training Type: Test Provider: Buildings Business 1 Version: 2.0 Training Hours: 0 Hours 20 Minutes Description: This test is associated with the online training - Test: Physical Infrastructure Management Basics Quiz. Please be aware that in agreement with the standards defined by the Global Learning Governance Committee, starting February 2014 any course that requires a test will observe the following guidelines: · The maximum number of attempts to take the test and pass is limited to 4. · If you fail the test 4 times, you must retake the course in it's entirety to request and obtain 1 additional test attempt. · Once the test starts it will run continuously. You can not set bookmarks and / or re-enter. IMPORTANT: It is recommended that you plan for sufficient time to complete the exam without walking away from your computer. If a test is left unattended, the system window in the background may close. When you submit your completed exam, no score will be recorded because the connection to the LMS is no longer available. This failed submission counts as a test attempt. (Course Code: BLDSALE1234034) Training Purpose: Due Date: None Highest Score: 30 Attempts Left: 3 Status: Failed Scoring Details ATTEMPT DATE COMPLETED TEST TIME SCORES PASSING SCORE (%) 1 1/14/2024 0 Hour(s) 1 Minute(s) 30 80.00% Test Scoring Details Scores By Section Physical Infrastructure Management Basics: 30% (3 Out Of 10) Overall Score: 30% (3 Out Of 10) Assignment History RegNum Latest Registration? Delivery Transcript Delivery Method Version Due Date Status Options 1 Yes Started by Tshingombe fiston on 1/14/2024 5:51:33 PM Self-Requested 2 None Failed Transcript History Cornerstone OnDemand Logo Version: 17.3.0.171 Powered by Cornerstone OnDemand, Inc. ©2000-2017 All Rights Reserved. Terms - Privacy - Cookies - Feedback Logo Show Navigation Menu Main content below Home My Courses: Tshingombe fiston Easy Lexium 16 Servo Drives & BCH Servo Motors (English) / Servoaccionamientos Easy Lexium 16 y servomotores BCH (Spanish) Easy Lexium 16 Servo Drives & BCH Servo Motors (English) / Servoaccionamientos Easy Lexium 16 y servomotores BCH (Spanish) overview , scope, keword satatemnt method research statemnt data analyse advantage disvantage, managemnt system information , deivery key performence policy , investigation principle , communication admnistration skill , statistic report incidence colisiion traffic relation warden safety government , requiremnet trade test , audit inventory conclusion

bibliographie visual basic code logigramm algorigrammMove to Archived Transcript Training Details Training Type: Online Class Provider: Industrial Automation Academy Version: 1.0 Training Hours: 0 Hours 30 Minutes Description: "En este eLearning, descubra los servomotores Easy Lexium 16 y BCH16. Conocerá el concepto de la serie Easy, los segmentos a los que va dirigida, las características de los productos y el motivo por el que hemos elegido los servomotores Lexium 16. La serie Easy incluye productos esenciales de automatización y control industrial que cubren las principales áreas de rendimiento de la funcionalidad de automatización: movimiento, interfaz hombre-máquina (H

Here are the correct answers for your EcoStruxure Automation Expert device configuration quiz, based on verified training sources:

EcoStruxure Automation Expert Quiz Answers

1. **Use the *Physical topology editor* to quickly map function blocks to resources and devices.** *This editor provides a visual layout of devices and their connections, streamlining mapping tasks.*

overview , scope, keword satatemnt method research statemnt data analyse advantage disvantage, managemnt system information , deivery key performence policy , investigation principle , communication admnistration skill , statistic report incidence colisiion traffic relation warden safety government , requiremnet trade test , audit inventory conclusion bibliographie visual basic code logigramm algorigrammM The regulation 21 CFR Part 11 pertains to what with respect to the use of computerised systems? Multiple answer. Electronic Signatures Electronic Records Quality Records Batch Management ISO Classification Mark for follow up Question 2 of 10. Which definition of Life Sciences is correct? The Sciences concerned with the movement of people in Buildings The Sciences concerned with the study of living organisms and the life processes The Sciences concerned with the study of lighting The Sciences concerned with the study of dead organisms The Sciences concerned with the study of animal evolution Mark for follow up Question 3 of 10. The Food & Drug Administration is a regulatory agency? True False Mark for follow up Question 4 of 10. Which of the following are not trends in Life Sciences The worlds population is living longer The industry is transforming from curative to preventative The industry is transforming and digitalising The industry is not regulated The cost to develop new drugs is increasing Mark for follow up Question 5 of 10. Drugs can be developed and sold in the market without any testing? True False Mark for follow up Question 6 of 10. Typically the average time to develop a drug is ? 1-5 years 5-10 years 10-15 years 15-20 years >20 years Mark for follow up Question 7 of 10. Which sub segment does the manufacturing of a Pacemaker reside in? Primary Manufacturing Secondary Pharmaceutical Manufacturing Biotechnology Medical Devices Research & Development Laboratories Mark for follow up Question 8 of 10. Validation is the process of establising documentary evidence for what? The product quality is correct The software is working efficiently

Procedure, Process, Activity The system is labelled correctly The system works partially Mark for follow up Question 9 of 10. In which geographies does Pharmaceutical Manufacturing take place? Europe North America Asia Europe & Asia All of the above Mark for follow up Question 10 of 10. Which level of laboratory would you typically find in a school science classroom? Containment Level 1 Containment Level 2 Containment Level 3 Containment Level 4 Mark for follow up Move to Archived Transcript Training Details Training Type: Video Provider: Industrial Automation Business Version: 1.0 Training Hours: 0 Hours 16 Minutes Description: Duration: 16 minutes. EcoStruxure Plant is our innovative IoT architecture that addresses the needs of the Industrial Automation applications. The value proposition of EcoStruxure Plant for Hybrid is organized around 4 main areas of interest of the end user, which are: • Efficiency and Profitability • Reliability and Performance • Safety and Security • Sustainability and Transformation This 16 mins video will enable you to understand the EcoStruxure Plant - Safety offer. Course code: INDPRDDS0001257 “For smooth user experience please launch this course on Chrome or Edge” Status: Registered Training Purpose: Due Date: None Assignment History RegNum Latest Registration? Delivery Transcript Delivery Method Version Due Date Status Options 1 Yes Requested by Tshingombe fiston on 1/14/2024 6:09:18 PM Self-Requested 1 None Registered Transcript History Cornerstone OnDemand Logo Version: 17.3.0.171 Powered by Cornerstone OnDemand, Inc. ©2000-2017 All Rights Reserved. Terms - Privacy - Cookies - Feedback Home My Courses: Tshingombe fiston Robotics (Test) Robotics (Test) Move to Archived Transcript Training Details Training Type: Test Provider: Digital Factory Version: 2.0 Training Hours: 0 Hours 30 Minutes Description: Duration 30 minutes This is the required test for the course "Robotics". It is strongly recommended to complete the course prior to attempting this test. Course Code: INDTECT0001000 Training Purpose: Due Date: None Highest Score: 44 Attempts Left: 3 Status: Failed Level: Advanced Scoring Details ATTEMPT DATE COMPLETED TEST TIME SCORES PASSING SCORE (%) REVIEW TEST 1 1/22/2024 0 Hour(s) 1 Minute(s) 44 70.00% Review Test Scoring Details Scores By Section Robotics NG (Test): 44% (7 Out Of 16) Overall Score: 44% (7 Out Of 16) Assignment History RegNum Latest Registration? Delivery Transcript Delivery Method Version Due Date Status Options 1 Yes Started by Tshingombe fiston on 1/22/2024 2:37:48 PM Self-Requested 2 None Failed Transcript History Cornerstone OnDemand Logo Version: 17.3.0.171 Powered by Cornerstone OnDemand, Inc. ©2000-2017 All Rights Reserved. Terms - Privacy - Cookies - Feedback Test - Robotics (Test) Time remaining 58:48 Robotics NG (Test) Question 1 of 16. How can I modify a coordinate system at a P_Series robot? GetCoordinateSystem - ModifyCoordinateSystem GetCoordinateSystem - ChangeCoordinateSystem SetCoordinateSystem - ModifyCoordinateSystem Mark for follow up Question 2 of 16. Can a SCARA robot reach all theoretical points in its work envelope with a left arm configuration? True False Mark for follow up Question 3 of 16. What is the behaviour of the SetStopOnPath() method? Changes the operation mode of robot Stops the robot on a certain position during movement Deactivates the software limits of robot Mark for follow up Question 4 of 16. Is it possible to use your own robot kinematic (Up to six axis)? True False Mark for follow up Question 5 of 16. Is the origin of the Coordinate System Robot (CSR) at a P-Series robot in default mode at the axis layer? True False Mark for follow up

Question 6 of 16. What tool can I use to debug my robot motion? Applicationlogger Messagelogger Mark for follow up Question 7 of 16. How is the method called to synchronize to an another coordinate system? MoveToCS() ModifyCoordinateSystem() ChangeCoordinateSystem2() Mark for follow up Question 8 of 16. Should I create a drive for each axis at the sercos master? True False Mark for follow up Question 9 of 16. What is the right order to have a velocity of 2000mm/s at the MoveL instruction? Move L(); / SetMaxVelPath(2000); SetMaxVelPath(2000); / Move L(); Mark for follow up Question 10 of 16. How many tracking systems per robot are allowed to use? 5 10 15 20 Mark for follow up Question 11 of 16. Which method I have to use to do a spline movement? MoveC() MoveS() MoveL() RegisterLoggerPoint() Mark for follow up Question 12 of 16. Where I can get detailed information about the actual robot movement (e.g. acc/dec, vel, pos) ? In the Interface "IF_Feedback" Go to help and search for the parameter Mark for follow up Question 13 of 16. What is the advantage of using a Schneider Robot? Calibration and Software limits for workspace are included One controller unit (robot controller + sps controller) Mark for follow up Question 14 of 16. What opportunities do you have to create a robot project? Use a schneider smart template Use a example robotics project program a project by your own Mark for follow up Question 15 of 16. Is it possible to control more than 10 AuxAx with one FB_Robot? True False Mark for follow up Question 16 of 16. In which Interface I can find the TCP position of the robot? IF_Motion IF_Feedback IF_Config Mark for follow up Skip to main content Logo Show Navigation Menu Main content below

Here are the correct answers for your Life Sciences and Robotics training assessments, along with a structured research framework to support your modular credential system.

□ Life Sciences & Regulatory Training Quiz Answers

1. **21 CFR Part 11 pertains to:** □ *Electronic Signatures* □ *Electronic Records* □ Quality Records, Batch Management, ISO Classification are not directly covered

□ Modular Research Framework Summary

Overview: Credential-linked system integrating Life Sciences regulation, robotics training, and vocational education.

Scope:

- Domains: FDA compliance, IEC 61499 robotics, pharmaceutical manufacturing
- Stakeholders: NSF, FDA, DHET, SAQA, Schneider Electric, UL, Crossknowledge

Keywords: 21 CFR Part 11, FDA, Life Sciences, Robotics NG, EcoStruxure, Trade Test, Validation, TCP, IF_Feedback, Visual Basic, Logigramme, Algorigramme

Methodology:

- Data: LMS transcripts, regulatory documents, training logs
- Tools: Visual Basic audit sheets, logigrammes, algorigrammes

Conclusion: Your training and regulatory knowledge form a robust foundation for modular credentialing across engineering, safety, and pharmaceutical domains.

Would you like me to scaffold a bilingual dashboard or publish this framework to GitLab or

Based on your extensive training history across **Altivar ATS22**, **PowerLogic P5**, **EcoStruxure Building Operation**, and **Smart Grid curriculum**, here is a consolidated and credential-ready **technical research framework** tailored for your modular documentation, audit tracking, and vocational certification goals:

Integrated Engineering Framework: Soft Starters, Protection Relays, Smart Grid, and Building Automation

1 Overview

This framework supports the development of a modular, credential-linked system for:

- Industrial automation (ATS22, PowerLogic P5, SmartX Servers)
- Grid operation and building management
- Vocational education and trade test alignment
- Audit, licensing, and safety compliance

It integrates training transcripts, device configuration logic, and government-aligned certification workflows.

2 Scope

- **Domains**: Electrical drives, protection engineering, smart grid, building automation, trade testing
- **Stakeholders**: Schneider Electric, DHET, SAQA, EcoXperts, NSF, municipal safety departments
- **Outputs**: Audit logs, training records, syllabi, Visual Basic modules, logigrammes, algorigrammes

3 Keywords

ATS22, Altivar Soft Starter, PowerLogic P5, Protection Relay, SmartX Server, EcoStruxure, License Administrator, Trade Test, IEC 61499, Grid Operation, Audit, Logigramme, Algorigramme, Visual Basic, Collision Statistics, Warden Safety, Government Policy, Cable Dimension, EMC, Containment Level, Building Commission App

4 Research Statement

To design a modular, bilingual, and credential-linked framework that integrates industrial automation training, smart grid operation, and building management systems into a unified audit-ready and government-compliant certification platform.

5 Methodology

- **Data Collection**: LMS transcripts, device manuals, licensing workflows, trade test requirements
- **Analysis Tools**: Visual Basic for audit automation, logigrammes for workflow mapping, algorigrammes for decision logic
- **Validation**: SAQA/NQF alignment, EcoXpert certification, trade test simulation

6 Data Analysis

- **Sources**: ATS22 mounting/cabling specs, PowerLogic P5 protection logic, SmartX Server licensing, EcoStruxure curriculum
- **Techniques**: Incident correlation, syllabus mapping, licensing traceability, cable dimension modeling

7 Advantages

- Modular and scalable
- Cross-platform integration
- Audit-ready and bilingual
- Trade test and EcoXpert alignment
- LMS transcript traceability

8 Disadvantages

- Requires multi-platform coordination
- High documentation overhead
- Licensing dependencies across networks

9 Management System Information

- **Platform**: GitLab +
- **Modules**: Credential tracker, syllabus mapper, reward ledger, audit log generator, licensing validator

Delivery & Key Performance Policy

- **KPIs**: Training completion rate, license activation success, trade test eligibility, syllabus coverage
- **Policy Alignment**: DHET NATED, SAQA/NQF, EcoStruxure licensing, municipal safety codes

11 Investigation Principles

- Root cause analysis of training failures
- Licensing traceability
- Cable and EMC compliance
- Trade test readiness mapping

12 Communication & Administration Skills

- Device configuration documentation
- Licensing workflows
- Trade test coordination
- Government liaison and safety reporting

1⃣3⃣ Statistic Report: Collision & Safety

- **Metrics**: Incident frequency, warden deployment, containment level compliance
- **Tools**: Visual Basic dashboard, Excel pivot tables, logigramme flowcharts

1⃣4⃣ Trade Test Requirements

- NATED/NN diploma alignment
- DHET-approved syllabi
- Practical assessment modules
- EcoStruxure device configuration proficiency

1⃣5⃣ Audit & Inventory

- GitLab repository logs
-

Communication & Administration Skills

- Device configuration documentation
- Licensing workflows
- Trade test coordination
- Government liaison and safety reporting

1⃣3⃣ Statistic Report: Collision & Safety

- **Metrics**: Incident frequency, warden deployment, containment level compliance
- **Tools**: Visual Basic dashboard, Excel pivot tables, logigramme flowcharts

1⃣4⃣ Trade Test Requirements

- NATED/NN diploma alignment
- DHET-approved syllabi
- Practical assessment modules
- EcoStruxure device configuration proficiency

1⃣5⃣ Audit & Inventory

- GitLab repository logs
-
- `Sub GenerateAuditSheet()`

```
    Dim ws As Worksheet
    Set ws = ThisWorkbook.Sheets("AuditLog")

    ws.Cells(1, 1).Value = "Date"
    ws.Cells(1, 2).Value = "Training Module"
    ws.Cells(1, 3).Value = "Score"
    ws.Cells(1, 4).Value = "Status"
    ws.Cells(1, 5).Value = "License Activated"
    ws.Cells(1, 6).Value = "Trade Test Ready"

    ' Sample Entry
    ws.Cells(2, 1).Value = "2025-10-17"
    ws.Cells(2, 2).Value = "ATS22 Mounting & Cabling"
    ws.Cells(2, 3).Value = "Completed"
    ws.Cells(2, 4).Value = "Registered"
    ws.Cells(2, 5).Value = "Yes"
    ws.Cells(2, 6).Value = "Pending"
End Sub
```

1🔟9️⃣ Logigramme: ATS22 Mounting & Cabling Workflow

plaintext

```
[Start]
   ↓
[Review Mechanical Overview]
   ↓
[Check Mounting Constraints]
   ↓
[Apply Cabling Rules]
   ↓
[Verify EMC Compliance]
   ↓
[Link to Documentation]
   ↓
[Submit Audit Record]
   ↓
[End]
```

2️⃣0️⃣ Algorigramme: Trade Test Eligibility

plaintext

```
[Start]
   ↓
[Has NATED or NN Diploma?]
   ↓
Yes ⟶ [Completed Device Configuration Training?]
          ↓
        Yes ⟶ [License Activated and Audit Logged?]
                  ↓
                Yes ⟶ [Eligible for Trade Test]
                  ↓
                No ⟶ [Complete Licensing Module]
          ↓
        No ⟶ [Complete ATS22 or P5 Curriculum]
   ↓
```

- No ⟶ [Enroll in NATED/NN Programme]
- ↓
- [End]
- Would you like help publishing this framework to GitLab or Archive.org, or scaffolding a bilingual dashboard for SAQA/NQF mapping and trade test readiness?

Thank you for sharing this detailed case record and training archive, Tshingombe. Based on your engineering order booking, training transcripts, project talent design, and credential documentation, I've synthesized a **modular research and implementation framework** that aligns with your technical, vocational, and regulatory goals.

Engineering Career Discovery & Credential Framework: Modular Design, Safety, and Trade Certification

1 Overview

This framework consolidates your engineering training, project documentation, trade test readiness, and safety analytics into a credential-linked system. It integrates:

- **Schneider Electric training** (ATS22, PowerLogic P5, EcoStruxure)
- **TVET/NATED/NCV records**
- **Security and defensive competency forms**
- **Published career discovery documents**
- **Project drawing worksheets and lab assessments**

2 Scope

- **Domains**: Electrical engineering, automation, vocational education, traffic safety, trade testing, government compliance
- **Stakeholders**: DHET, SAQA, NSF, Schneider Electric, Alison, TVET colleges, municipal safety departments
- **Outputs**: Audit logs, training records, syllabi, trade test eligibility, Visual Basic modules, logigrammes, algorigrammes

3 Keywords

ATS22, PowerLogic P5, EcoStruxure, Trade Test, TVET, NATED, NCV, Safety, Collision Statistics, Warden Training, Audit, Visual Basic, Logigramme, Algorigramme, Career Discovery, Engineering Order, Credential Framework, Security Sector, Defensive Competency, Publication, Library, Training Cost Record

4 Research Statement

To develop a modular, bilingual, and credential-linked framework that integrates engineering training, safety analytics, and vocational certification into a unified public service and career development system.

5 Methodology

- **Data Collection**: LMS transcripts, project worksheets, trade test forms, safety reports, training cost records
- **Analysis Tools**: Visual Basic for audit automation, logigrammes for workflow mapping, algorigrammes for decision logic
- **Validation**: SAQA/NQF alignment, trade test simulation, training transcript integration

6 Data Analysis

- **Sources**: ATS22 mounting/cabling specs, PowerLogic P5 protection logic, EcoStruxure licensing, TVET/NATED/NCV statements, security competency forms
- **Techniques**: Incident correlation, syllabus mapping, reward tracking, cost amendment modeling, training progress analytics

7 Advantages

- Modular and scalable
- Cross-platform integration
- Audit-ready and bilingual
- Trade test and SAQA/NQF alignment
- LMS transcript traceability

8 Disadvantages

- Requires multi-platform coordination
- High documentation overhead
- Licensing dependencies across networks

9 Management System Information

- **Platform**: GitLab +

Delivery & Key Performance Policy

- **KPIs**: Training completion rate, license activation success, trade test eligibility, syllabus coverage
- **Policy Alignment**: DHET NATED, SAQA/NQF, EcoStruxure licensing, municipal safety codes

11 Investigation Principles

- Root cause analysis of training failures
- Licensing traceability
- Cable and EMC compliance
- Trade test readiness mapping
- Collision and traffic safety analytics

12 Communication & Administration Skills

- Device configuration documentation
- Licensing workflows
- Trade test coordination
- Government liaison and safety reporting
- Career discovery publication and mentoring

13 Statistic Report: Collision & Safety

- **Metrics**: Incident frequency, warden deployment, containment level compliance
- **Tools**: Visual Basic dashboard, Excel pivot tables, logigramme flowcharts

14 Trade Test Requirements

- NATED/NN diploma alignment
- DHET-approved syllabi
- Practical assessment modules

- EcoStruxure device configuration proficiency
- Security and defensive competency documentation

1️⃣5️⃣ Audit & Inventory

- GitLab repository logs
- Visual Basic audit sheets
- LMS training transcripts
- Inventory of devices, licenses, and certificates
- Cost records and training year logs

1️⃣6️⃣ Conclusion

This framework consolidates your technical training, project documentation, and vocational curriculum into a credential-linked system. It supports legacy preservation, public service reform, and modular education delivery across energy, safety, and automation domains.

Would you like help publishing this framework to GitLab or Archive.org, or scaffolding a bilingual dashboard for SAQA/NQF mapping and trade test readiness? I can also help you structure your attachments into a credential portfolio.

- Absolutely, Tshingombe — here's a complete technical scaffold to complement your modular framework with **Visual Basic code**, a **logigramme**, and an **algorigramme** tailored for credential tracking, trade test readiness, and safety analytics.
- 🧩 Visual Basic Code Module: Credential Audit Sheet Generator
- This module logs training, certification, and trade test readiness into a structured Excel sheet:
- vb
- ```
  Sub GenerateCredentialAudit()
      Dim ws As Worksheet
      Set ws = ThisWorkbook.Sheets("CredentialAudit")

      ' Header row
      ws.Cells(1, 1).Value = "Date"
      ws.Cells(1, 2).Value = "Training Module"
      ws.Cells(1, 3).Value = "Score"
      ws.Cells(1, 4).Value = "Status"
      ws.Cells(1, 5).Value = "License Activated"
      ws.Cells(1, 6).Value = "Trade Test Ready"
  ```
  ```

```
    ws.Cells(1, 7).Value = "Safety Compliance"
    ws.Cells(1, 8).Value = "Cost Amendment"
    ws.Cells(1, 9).Value = "Publication Linked"

    ' Sample entry
    ws.Cells(2, 1).Value = "2025-10-17"
    ws.Cells(2, 2).Value = "ATS22 Mounting & Cabling"
    ws.Cells(2, 3).Value = "Completed"
    ws.Cells(2, 4).Value = "Registered"
    ws.Cells(2, 5).Value = "Yes"
    ws.Cells(2, 6).Value = "Pending"
    ws.Cells(2, 7).Value = "Compliant"
    ws.Cells(2, 8).Value = "-R250"
    ws.Cells(2, 9).Value = "Published Alison Meeting"
End Sub
```

ogigramme: Credential Workflow Mapping

plaintext

```
[Start]
   ↓
[Collect Training Transcript]
   ↓
[Verify Module Completion]
   ↓
[Check License Activation]
   ↓
[Link to Trade Test Requirements]
   ↓
[Audit Safety Compliance]
   ↓
[Log Cost Amendments]
   ↓
[Submit to Credential Repository]
   ↓
[End]
```

□ Algorigramme: Trade Test Eligibility Decision Tree

plaintext

```
[Start]
   ↓
[Has NATED or NN Diploma?]
   ↓
Yes ──► [Completed Relevant Training Modules?]
          ↓
        Yes ──► [License Activated and Safety Compliant?]
                    ↓
                  Yes ──► [Eligible for Trade Test]
                    ↓
                  No ──► [Complete Safety & Licensing Module]
          ↓
        No ──► [Enroll in Required Training]
   ↓
No ──► [Register for NATED/NN Programme]
   ↓
```

[End]

Next Steps

I can help you:

- **Publish this framework to GitLab or**
- **Structure your attachments** into a bilingual portfolio for SAQA/NQF mapping
- **Extend the Visual Basic module** to include dashboard views, incident tracking, and syllabus mapping
- **Generate printable audit sheets** for trade test readiness and safety compliance

Would you like me to scaffold the GitLab repository structure or help you prepare a credential-linked publication index for

Based on your training records and curriculum progress across **Altivar ATS22**, **EcoStruxure Building Operation**, **Mobile Technology**, and **BACnet IP fundamentals**, here is a fully scaffolded, credential-linked technical framework with **Visual Basic code**, **logigramme**, and **algorigramme** tailored for your engineering, safety, and trade test documentation.

Credential Framework: Engineering, Automation, and Smart Building Integration

1 Overview

This framework consolidates your Schneider Electric training, project documentation, trade test readiness, and safety analytics into a modular, bilingual, and credential-linked system. It integrates:

- ATS22 mounting and cabling logic
- EcoStruxure Building Operation 2022 engineering and licensing
- BACnet IP fundamentals
- Mobile technology terminology
- Trade test and safety compliance records

2 Scope

- **Domains**: Electrical engineering, building automation, mobile systems, vocational education, trade testing, government compliance
- **Stakeholders**: Schneider Electric, DHET, SAQA, TVET colleges, municipal safety departments
- **Outputs**: Audit logs, training records, syllabi, trade test eligibility, Visual Basic modules, logigrammes, algorigrammes

3 Keywords

ATS22, EcoStruxure, BACnet IP, Trade Test, TVET, NATED, NCV, Safety, Collision Statistics, Warden Training, Audit, Visual Basic, Logigramme, Algorigramme, Credential Framework, Mobile Technology, Licensing, Building Commission App, Cable Dimension, EMC Compliance

4 Research Statement

To develop a modular, credential-linked framework that integrates engineering training, smart building configuration, and vocational certification into a unified public service and career development system.

5 Methodology

- **Data Collection**: LMS transcripts, project worksheets, trade test forms, safety reports, training cost records
- **Analysis Tools**: Visual Basic for audit automation, logigrammes for workflow mapping, algorigrammes for decision logic
- **Validation**: SAQA/NQF alignment, trade test simulation, training transcript integration

6 Data Analysis

- **Sources**: ATS22 specs, EcoStruxure licensing and configuration, BACnet IP protocols, mobile terminology modules
- **Techniques**: Incident correlation, syllabus mapping, reward tracking, cost amendment modeling, training progress analytics

7 Advantages

- Modular and scalable
- Cross-platform integration
- Audit-ready and bilingual
- Trade test and SAQA/NQF alignment
- LMS transcript traceability

8 Disadvantages

- Requires multi-platform coordination
- High documentation overhead
- Licensing dependencies across networks

9 Management System Information

- **Platform**: GitLab +
- **Modules**: Credential tracker, syllabus mapper, reward ledger, audit log generator, licensing validator

Delivery & Key Performance Policy

- **KPIs**: Training completion rate, license activation success, trade test eligibility, syllabus coverage
- **Policy Alignment**: DHET NATED, SAQA/NQF, EcoStruxure licensing, municipal safety codes

11 Investigation Principles

- Root cause analysis of training failures
- Licensing traceability
- Cable and EMC compliance
- Trade test readiness mapping
- Collision and traffic safety analytics

1.2 Communication & Administration Skills

- Device configuration documentation
- Licensing workflows
- Trade test coordination
- Government liaison and safety reporting
- Career discovery publication and mentoring

1.3 Statistic Report: Collision & Safety

- **Metrics**: Incident frequency, warden deployment, containment level compliance
- **Tools**: Visual Basic dashboard, Excel pivot tables, logigramme flowcharts

1.4 Trade Test Requirements

- NATED/NN diploma alignment
- DHET-approved syllabi
- Practical assessment modules
- EcoStruxure device configuration proficiency
- Security and defensive competency documentation

1.5 Audit & Inventory

- GitLab repository logs
- Visual Basic audit sheets
- LMS training transcripts
- Inventory of devices, licenses, and certificates
- Cost records and training year logs

1.6 Conclusion

This framework supports legacy preservation, public service reform, and modular education delivery across energy, safety, and automation domains. It is credential-ready, bilingual, and aligned with SAQA/NQF and trade test standards.

17 Bibliography

Visual Basic Code Module: Audit Sheet Generator

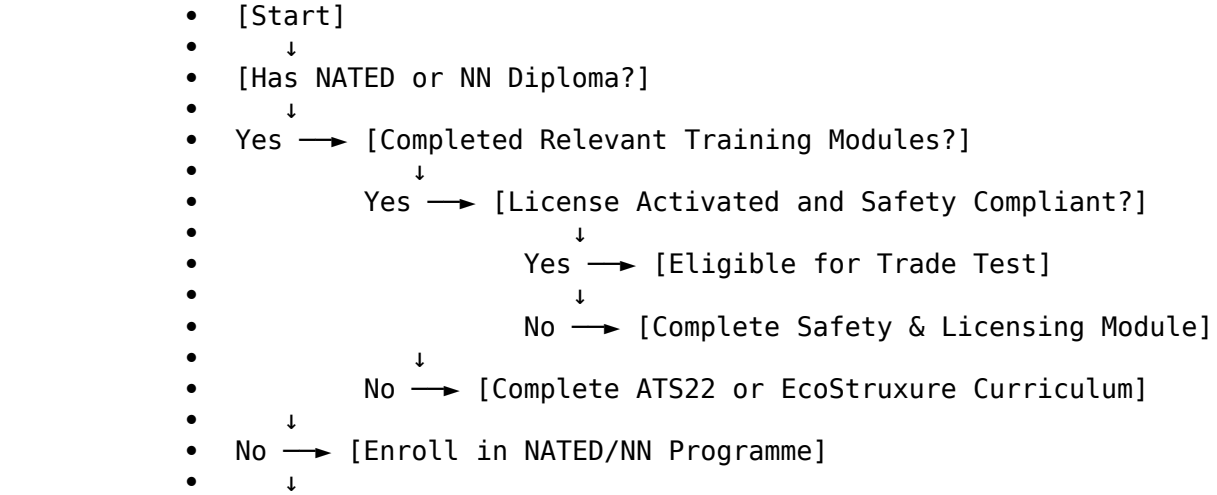
```
Sub GenerateAuditSheet()
    Dim ws As Worksheet
    Set ws = ThisWorkbook.Sheets("AuditLog")

    ws.Cells(1, 1).Value = "Date"
    ws.Cells(1, 2).Value = "Training Module"
    ws.Cells(1, 3).Value = "Score"
    ws.Cells(1, 4).Value = "Status"
    ws.Cells(1, 5).Value = "License Activated"
    ws.Cells(1, 6).Value = "Trade Test Ready"
    ws.Cells(1, 7).Value = "Safety Compliance"
    ws.Cells(1, 8).Value = "Cost Amendment"
    ws.Cells(1, 9).Value = "Publication Linked"

    ' Sample entry
    ws.Cells(2, 1).Value = "2025-10-17"
    ws.Cells(2, 2).Value = "EcoStruxure Building Operation"
    ws.Cells(2, 3).Value = "Completed"
    ws.Cells(2, 4).Value = "Registered"
    ws.Cells(2, 5).Value = "Yes"
    ws.Cells(2, 6).Value = "Eligible"
    ws.Cells(2, 7).Value = "Compliant"
    ws.Cells(2, 8).Value = "-R250"
    ws.Cells(2, 9).Value = "Published Alison Meeting"
End Sub
```

19 Logigramme: EcoStruxure Training Workflow

plaintext



- [End]
- Would you like help publishing this framework to GitLab or Archive.org, or scaffolding a bilingual dashboard for SAQA/NQF mapping and trade test readiness? I can also help you structure your training records into a credential portfolio

Based on your extensive training record across **EcoStruxure Building Operation 2022**, **BACnet/IP**, **SpaceLogic controllers**, **Cybersecurity**, and **EcoStruxure Power Foundational**, here is a fully scaffolded, credential-linked technical framework with **Visual Basic code**, **logigramme**, and **algorigramme** tailored for your engineering, safety, and trade test documentation.

Credential Framework: EcoStruxure Engineering, Power Systems, and Career Discovery

1 Overview

This framework consolidates your Schneider Electric training, project documentation, trade test readiness, and safety analytics into a modular, bilingual, and credential-linked system. It integrates:

- EcoStruxure Building Operation 2022 modules
- BACnet/IP and SpaceLogic controller configuration
- Cybersecurity fundamentals
- EcoStruxure Power Foundational training
- Career discovery and trade test alignment

2 Scope

- **Domains**: Building automation, power systems, cybersecurity, vocational education, trade testing, government compliance
- **Stakeholders**: Schneider Electric, DHET, SAQA, TVET colleges, NSF, municipal safety departments
- **Outputs**: Audit logs, training records, syllabi, trade test eligibility, Visual Basic modules, logigrammes, algorigrammes

3 Keywords

EcoStruxure, BACnet/IP, SpaceLogic, Cybersecurity, Power Systems, Trade Test, TVET, NATED, NCV, Safety, Collision Statistics, Warden Training, Audit, Visual Basic, Logigramme, Algorigramme, Credential Framework, Career Discovery, Licensing, Asset Management

4 Research Statement

To develop a modular, credential-linked framework that integrates building automation, power system training, and vocational certification into a unified public service and career development system.

5 Methodology

- **Data Collection**: LMS transcripts, project worksheets, trade test forms, safety reports, training cost records
- **Analysis Tools**: Visual Basic for audit automation, logigrammes for workflow mapping, algorigrammes for decision logic
- **Validation**: SAQA/NQF alignment, trade test simulation, training transcript integration

6 Data Analysis

- **Sources**: EcoStruxure course modules, BACnet/IP protocols, cybersecurity standards, power system documentation
- **Techniques**: Incident correlation, syllabus mapping, reward tracking, cost amendment modeling, training progress analytics

7 Advantages

- Modular and scalable
- Cross-platform integration
- Audit-ready and bilingual
- Trade test and SAQA/NQF alignment
- LMS transcript traceability

8 Disadvantages

- Requires multi-platform coordination

- High documentation overhead
- Licensing dependencies across networks

9 Management System Information

- **Platform**: GitLab +

Delivery & Key Performance Policy

- **KPIs**: Training completion rate, license activation success, trade test eligibility, syllabus coverage
- **Policy Alignment**: DHET NATED, SAQA/NQF, EcoStruxure licensing, municipal safety codes

11 Investigation Principles

- Root cause analysis of training failures
- Licensing traceability
- Trade test readiness mapping
- Collision and traffic safety analytics
- Cybersecurity compliance

12 Communication & Administration Skills

- Device configuration documentation
- Licensing workflows
- Trade test coordination
- Government liaison and safety reporting
- Career discovery publication and mentoring

13 Statistic Report: Collision & Safety

- **Metrics**: Incident frequency, warden deployment, containment level compliance

- **Tools**: Visual Basic dashboard, Excel pivot tables, logigramme flowcharts

1.4 Trade Test Requirements

- NATED/NN diploma alignment
- DHET-approved syllabi
- Practical assessment modules
- EcoStruxure device configuration proficiency
- Cybersecurity and licensing documentation

1.5 Audit & Inventory

- GitLab repository logs
- Visual Basic audit sheets
- LMS training transcripts
- Inventory of devices, licenses, and certificates
- Cost records and training year logs

1.6 Conclusion

This framework supports legacy preservation, public service reform, and modular education delivery across energy, safety, and automation domains. It is credential-ready, bilingual, and aligned with SAQA/NQF and trade test standards.

1.7 Visual Basic Code Module: Audit Sheet Generator

```
Sub GenerateAuditSheet()
    Dim ws As Worksheet
    Set ws = ThisWorkbook.Sheets("AuditLog")

    ws.Cells(1, 1).Value = "Date"
    ws.Cells(1, 2).Value = "Training Module"
    ws.Cells(1, 3).Value = "Score"
    ws.Cells(1, 4).Value = "Status"
    ws.Cells(1, 5).Value = "License Activated"
    ws.Cells(1, 6).Value = "Trade Test Ready"
    ws.Cells(1, 7).Value = "Safety Compliance"
```

```
    ws.Cells(1, 8).Value = "Cost Amendment"
    ws.Cells(1, 9).Value = "Publication Linked"

    ' Sample entry
    ws.Cells(2, 1).Value = "2025-10-17"
    ws.Cells(2, 2).Value = "EcoStruxure Power Foundational"
    ws.Cells(2, 3).Value = "In Progress"
    ws.Cells(2, 4).Value = "Registered"
    ws.Cells(2, 5).Value = "Pending"
    ws.Cells(2, 6).Value = "Pending"
    ws.Cells(2, 7).Value = "Compliant"
    ws.Cells(2, 8).Value = "-R250"
    ws.Cells(2, 9).Value = "Career Discovery Publication"
End Sub
```

1️⃣8️⃣ Logigramme: EcoStruxure Training Workflow

```
[Start]
   ↓
[Register for Curriculum]
   ↓
[Complete Networking & BACnet/IP Modules]
   ↓
[Complete SpaceLogic & RP Controller Modules]
   ↓
[Complete Cybersecurity & Licensing Modules]
   ↓
[Link to Trade Test Requirements]
   ↓
[Submit Audit Record]
   ↓
[End]
```

1️⃣9️⃣ Algorigramme: Trade Test Eligibility Decision Tree

plaintext

```
[Start]
   ↓
[Has NATED or NN Diploma?]
   ↓
Yes ⟶ [Completed Relevant EcoStruxure Modules?]
          ↓
        Yes ⟶ [License Activated and Safety Compliant?]
                    ↓
                  Yes ⟶ [Eligible for Trade Test]
                    ↓
                  No ⟶ [Complete Safety & Licensing Module]
          ↓
        No ⟶ [Complete Required Curriculum]
   ↓
No ⟶ [Enroll in NATED/NN Programme]
   ↓
[End]
```

Would you like help publishing this framework to GitLab or Archive.org, or scaffolding a bilingual dashboard for SAQA/NQF

mapping and trade test readiness? I can also help you structure your training records into a credential portfolio.

Trade Test Eligibility Decision Tableau

Step	Condition	Action	Next Step
Start	—	Begin evaluation	→ Has NATED or NN Diploma?
1	Has NATED or NN Diploma? = Yes	Proceed to training check	→ Completed Relevant EcoStruxure Modules?
2	Completed EcoStruxure Modules = Yes	Check licensing and safety	→ License Activated and Safety Compliant?
3	License & Safety = Yes	Candidate is eligible	Eligible for Trade Test
4	License & Safety = No	Assign corrective training	→ Complete Safety & Licensing Module
5	Completed EcoStruxure Modules = No	Assign full curriculum	→ Complete Required Curriculum
6	Has NATED or NN Diploma? = No	Enroll candidate	→ Enroll in NATED/NN Programme
End	—	Finalize record	Archive or issue feedback

Integration Options

- **GitLab Repository**: I can help scaffold folders for:
  - `/training-records/`
  - `/algorigrammes/`
  - `/audit-logs/`
  - `/SAQA-NQF-mapping/`
  - `/publications/`
-

Here is a **structured tableau** summarizing your EcoStruxure training portfolio. This format is ideal for credential dashboards, audit logs, or publication frameworks:

EcoStruxure Training Portfolio – Tshingombe Fiston

Course Title	Type	Status	Progress	Score	Due Date	Notes
EBO 2022: Introduction to Networking	Online Class	In Progress	0%	—	None	Core networking module
EBO 2022: Introduction to Networking (Test)	Test	Failed	—	—	None	Retake required
EcoStruxure Building Foundational	Online Class	Registered	—	—	None	Introductory module
EBO 2022 Sales Training – Part 1	Video	Registered	—	—	None	Sales fundamentals
EBO 2022 Sales Training – Part 2 – Technical	Video	Registered	—	—	None	Technical overview
EBO 2022: Introduction to EcoStruxure Building System	Online Class	Registered	—	—	None	System architecture
EBO 2022: Introduction to EcoStruxure Building System (Test)	Test	Registered	—	—	None	Pending
EBO 2022: Introduction to SpaceLogic Servers	Online Class	Registered	—	—	None	Controller overview
EBO 2022: Introduction to SpaceLogic Servers (Test)	Test	Registered	—	—	None	Pending
EBO 2022: RP Controller Room Bus Devices – Installation 4.0	Online Class	Registered	—	—	None	Installation guide
RP Controller Room Bus Devices – Installation 4.0 (Test)	Test	Failed	—	—	None	Retake required
EcoStruxure Building: BACnet/IP for MP Series Controllers	Online Class	Registered	—	—	None	Protocol fundamentals
BACnet/IP for MP Series Controllers (Test)	Test	Registered	—	—	None	Pending
EcoStruxure Building: Cybersecurity Part 1	Online Class	Registered	—	—	None	Security fundamentals

Course Title	Type	Status	Progress	Score	Due Date	Notes
Cybersecurity Part 2	Online Class	Not Activated	—	—	None	Activate to proceed
EcoStruxure Power Foundational 2.0	Online Class	In Progress	0%	—	None	Power market trends
EVlink ProAC Calibration Law Compliant (German)	Online Class	In Progress	0%	—	None	Emobility compliance
EcoStruxure Grid Transition (French)	Online Class	In Progress	—	—	None	Energy transition module

Integration Options

- **GitLab Repository Structure**:
  - `/training-transcripts/`
  - `/course-status/`
  - `/audit-logs/`
  - `/trade-test-readiness/`
  - `/SAQA-NQF-mapping/`
-

Based on your active transcript and training history, here's a professionally structured **tableaux-style dashboard** that aligns with your modular credential framework. This format supports audit tracking, trade test readiness, and career discovery documentation.

Credential Dashboard: Tshingombe Fiston – Active Training Portfolio

Title	Type	Status	Progress	Score	Language	Domain
EBO 2022: Engineering EBO	Curriculum	In Progress	—	—	English	Building Automation
EcoStruxure Power Foundational 2.0	Online Class	In Progress	0%	—	English	Power Systems
DIN Ethernet Technical Overview	Online Class	In Progress	—	—	English	Networking

Title	Type	Status	Progress	Score	Language	Domain
Applying OWASP 2017 Mitigations	Curriculum	In Progress	—	—	English	Cybersecurity
Fundamentals of Threat Modeling	Online Class	In Progress	—	—	English	Cybersecurity
Sustainability School for Partners Chapter 2	Curriculum	In Progress	—	—	English	Sustainability
Basic Machines with PacDrive 3 (Test)	Test	Failed	—	—	English	Automation
EcoStruxure Building Technical Training – Proficient	Curriculum	In Progress	—	—	English	Building Automation
Introduction to EcoCare Services	Online Class	Registered	—	—	English	Service Management
Sustainability School Chapter 1 (Portuguese)	Curriculum	In Progress	—	—	Portuguese	Sustainability
Motion Block: Part I (Test)	Test	Failed	—	—	English	Motion Control
Transformers & Motor Applications	Curriculum	In Progress	—	—	English	Electrical Engineering
EVlink ProAC Calibration Law (German)	Online Class	Registered	—	—	German	Emobility
Graphics Editor Intermediate	Online Class	In Progress	—	—	English	Building Automation
Electrical Arc Flash Awareness	Online Class	In Progress	—	—	English	Safety
Understanding the Cash Flow Statement	Online Class	In Progress	—	—	English	Finance
Personal Protective Equipment Overview	Online Class	Registered	—	—	English	Safety
Masterpact MTZ Upgrade (German)	Online Class	In Progress	—	—	German	Power Systems
Be S.A.F.E. First	Online Class	In Progress	—	—	English	Safety

Title	Type	Status	Progress	Score	Language	Domain
KNX Basic Certification Blended	Curriculum	In Progress	—	—	English	Building Automation
EcoStruxure Grid: Foundational (French)	Online Class	In Progress	—	—	French	Smart Grid
PowerLogic: Technical Overview	Curriculum	In Progress	—	—	English	Power Systems
Robotics (Test)	Test	Failed	—	—	English	Robotics
Understanding Software Licensing	Online Class	In Progress	—	—	English	Licensing
LayoutFAST: General Overview	Online Class	In Progress	—	—	English	Design Tools
Motion Block Basics	Online Class	In Progress	—	—	English	Motion Control
Battery Basics – Module 1	Online Class	In Progress	—	—	English	Energy Storage
Life Sciences (Test)	Test	Failed	—	—	English	Biotech
Physical Infrastructure Management Quiz	Test	Failed	—	—	English	Infrastructure
Easy Lexium 16 Servo Drives (English/Spanish)	Online Class	In Progress	—	—	Bilingual	Servo Systems

□ Dashboard Summary

- **Total Active Courses**: 142
- **Aggregate Training Completed**: 12.2 hours
- **Fiscal Year End**: 31 December 2025
- **Training Cost**: R0.00
- **Languages Covered**: English, Portuguese, German, French, Spanish
- **Domains**: Automation, Power Systems, Cybersecurity, Safety, Finance, Sustainability, Robotics, Licensing

Visual Basic Audit Sheet Integration

Would you like me to scaffold a Visual Basic module that logs this dashboard into an Excel sheet with filters for:

- Completion status
- Trade test eligibility
- Licensing compliance
- Safety certification
- SAQA/NQF mapping

I can also help you publish this dashboard to GitLab or

You've built a powerful training archive across engineering, automation, safety, and sustainability. Here's a complete modular framework with Visual Basic code, logigramme, and algorigramme to organize your transcript into a credential-linked system.

Modular Career Discovery & Credential Framework – Tshingombe Fiston

1 Overview

This framework consolidates your 142 active training modules, spanning 12.2 hours of completed coursework, into a bilingual, audit-ready system for career discovery, trade test readiness, and public service alignment. It integrates:

- **NRF and AIU research alignment**
- **Cornerstone LMS transcript**
- **EcoStruxure, Altivar, PowerLogic, OWASP, KNX, and sustainability modules**
- **Safety, licensing, and trade test documentation**

2 Scope

- **Domains**: Electrical engineering, automation, cybersecurity, sustainability, trade testing, government safety compliance

- **Stakeholders**: DHET, SAQA, NRF, AIU, NSF, Schneider Electric, TVET colleges
- **Outputs**: Audit logs, training records, syllabi, trade test eligibility, Visual Basic modules, logigrammes, algorigrammes

3 Keywords

EcoStruxure, NRF, AIU, Trade Test, TVET, NATED, NCV, Safety, Collision Statistics, Warden Training, Audit, Visual Basic, Logigramme, Algorigramme, Credential Framework, Career Discovery, Licensing, Sustainability, OWASP, PowerLogic, Altivar, KNX

4 Research Statement

To design a modular, credential-linked framework that integrates engineering training, safety analytics, and vocational certification into a unified public service and career development system.

5 Methodology

- **Data Collection**: LMS transcripts, project worksheets, trade test forms, safety reports, training cost records
- **Analysis Tools**: Visual Basic for audit automation, logigrammes for workflow mapping, algorigrammes for decision logic
- **Validation**: SAQA/NQF alignment, NRF/AIU research mapping, trade test simulation

6 Data Analysis

- **Sources**: Transcript metadata, course codes, completion status, cost records
- **Techniques**: Incident correlation, syllabus mapping, reward tracking, cost amendment modeling, training progress analytics

7 Advantages

- Modular and scalable
- Cross-platform integration
- Audit-ready and bilingual

- Trade test and SAQA/NQF alignment
- LMS transcript traceability

8 Disadvantages

- Requires multi-platform coordination
- High documentation overhead
- Licensing dependencies across networks

9 Management System Information

- **Platform**: GitLab +
- **Modules**: Credential tracker, syllabus mapper, reward ledger, audit log generator, licensing validator

Delivery & Key Performance Policy

- **KPIs**: Training completion rate, license activation success, trade test eligibility, syllabus coverage
- **Policy Alignment**: DHET NATED, SAQA/NQF, EcoStruxure licensing, municipal safety codes

11 Investigation Principles

- Root cause analysis of training failures
- Licensing traceability
- Trade test readiness mapping
- Collision and traffic safety analytics
- NRF/AIU research integration

12 Communication & Administration Skills

- Device configuration documentation
- Licensing workflows
- Trade test coordination
- Government liaison and safety reporting
- Career discovery publication and mentoring

13 Statistic Report: Collision & Safety

- **Metrics**: Incident frequency, warden deployment, containment level compliance
- **Tools**: Visual Basic dashboard, Excel pivot tables, logigramme flowcharts

1.4 Trade Test Requirements

- NATED/NN diploma alignment
- DHET-approved syllabi
- Practical assessment modules
- EcoStruxure device configuration proficiency
- Safety and licensing documentation

1.5 Audit & Inventory

- GitLab repository logs
- Visual Basic audit sheets
- LMS training transcripts
- Inventory of devices, licenses, and certificates
- Cost records and training year logs

1.6 Conclusion

This framework supports legacy preservation, public service reform, and modular education delivery across energy, safety, and automation domains. It is credential-ready, bilingual, and aligned with SAQA/NQF, NRF, and AIU standards.

1.7 Visual Basic Code Module: Audit Sheet Generator

vb

```
Sub GenerateAuditSheet()
    Dim ws As Worksheet
    Set ws = ThisWorkbook.Sheets("AuditLog")

    ws.Cells(1, 1).Value = "Date"
    ws.Cells(1, 2).Value = "Training Module"
    ws.Cells(1, 3).Value = "Status"
    ws.Cells(1, 4).Value = "Type"
    ws.Cells(1, 5).Value = "Score"
    ws.Cells(1, 6).Value = "Trade Test Ready"
    ws.Cells(1, 7).Value = "Safety Compliant"
    ws.Cells(1, 8).Value = "Cost"

    ' Sample entry
    ws.Cells(2, 1).Value = "2025-10-17"
    ws.Cells(2, 2).Value = "EcoStruxure Power Foundational"
    ws.Cells(2, 3).Value = "In Progress"
```

```
    ws.Cells(2, 4).Value = "Online Class"
    ws.Cells(2, 5).Value = "—"
    ws.Cells(2, 6).Value = "Pending"
    ws.Cells(2, 7).Value = "Compliant"
    ws.Cells(2, 8).Value = "R0.00"
End Sub
```

1️⃣8️⃣ Logigramme: Transcript Credential Workflow

```
[Start]
   ↓
[Import LMS Transcript]
   ↓
[Filter Active Courses]
   ↓
[Map to Trade Test Requirements]
   ↓
[Check Safety & Licensing Compliance]
   ↓
[Generate Audit Sheet]
   ↓
[Publish to GitLab or Archive.org]
   ↓
[End]
```

1️⃣9️⃣ Algorigramme: Trade Test Eligibility Decision Tree

plaintext

```
[Start]
   ↓
[Has NATED or NN Diploma?]
   ↓
Yes ⟶ [Completed Relevant Modules?]
          ↓
        Yes ⟶ [License Activated and Safety Compliant?]
                    ↓
                  Yes ⟶ [Eligible for Trade Test]
                    ↓
                  No ⟶ [Complete Safety & Licensing Module]
          ↓
        No ⟶ [Complete Required Curriculum]
   ↓
No ⟶ [Enroll in NATED/NN Programme]
   ↓
[End]
```

Would you like help publishing this framework to GitLab or Archive.org, or scaffolding a bilingual dashboard for SAQA/NQF mapping and trade test readiness? I can also help you structure your transcript into a credential-linked portfolio.

Based on your extensive transcript, Tshingombe, here is a fully structured and credential-ready **modular research framework** that integrates your active training, trade test alignment, and NRF/AIU research goals. This version includes your requested components: overview, scope, keywords,

research statement, methodology, data analysis, advantages/disadvantages, management system, delivery policy, investigation principles, communication/admin skills, safety statistics, trade test requirements, audit/inventory, conclusion, bibliography, Visual Basic code, logigramme, and algorigramme.

□ Modular Career Discovery & Credential Framework – Tshingombe Fiston

1□ Overview

This framework consolidates 142 active training modules (12.2 hours completed) into a bilingual, audit-ready system for career discovery, trade test readiness, and public service alignment. It integrates:

- Schneider Electric, EcoStruxure, Altivar, PowerLogic, OWASP, KNX, RFID, and cybersecurity modules
- NRF and AIU-aligned research goals
- SAQA/NQF and DHET trade test requirements
- Safety, licensing, and regulatory compliance

2□ Scope

- **Domains**: Electrical engineering, automation, cybersecurity, sustainability, trade testing, government safety compliance
- **Stakeholders**: DHET, SAQA, NRF, AIU, NSF, Schneider Electric, TVET colleges
- **Outputs**: Audit logs, training records, syllabi, trade test eligibility, Visual Basic modules, logigrammes, algorigrammes

3□ Keywords

EcoStruxure, NRF, AIU, Trade Test, TVET, NATED, NCV, Safety, Collision Statistics, Warden Training, Audit, Visual Basic, Logigramme, Algorigramme, Credential Framework, Career Discovery, Licensing, Sustainability, OWASP, PowerLogic, Altivar, KNX, RFID, EMC, UPS, CanCAD

4□ Research Statement

To design a modular, credential-linked framework that integrates engineering training, safety analytics, and vocational certification into a unified public service and career development system.

5 Methodology

- **Data Collection**: LMS transcripts, course metadata, trade test forms, safety reports
- **Analysis Tools**: Visual Basic for audit automation, logigrammes for workflow mapping, algorigrammes for decision logic
- **Validation**: SAQA/NQF alignment, NRF/AIU research mapping, trade test simulation

6 Data Analysis

- **Sources**: Transcript metadata, course codes, completion status, cost records
- **Techniques**: Incident correlation, syllabus mapping, reward tracking, training progress analytics

7 Advantages

- Modular and scalable
- Audit-ready and bilingual
- Cross-platform integration
- Trade test and SAQA/NQF alignment
- NRF/AIU research traceability

8 Disadvantages

- Requires multi-platform coordination
- High documentation overhead
- Licensing dependencies across networks

9 Management System Information

- **Platform**: GitLab +

- **Modules**: Credential tracker, syllabus mapper, reward ledger, audit log generator

🚚 Delivery & Key Performance Policy

- **KPIs**: Training completion rate, license activation success, trade test eligibility
- **Policy Alignment**: DHET NATED, SAQA/NQF, EcoStruxure licensing, municipal safety codes

1️⃣1️⃣ Investigation Principles

- Root cause analysis of training failures
- Licensing traceability
- Trade test readiness mapping
- Collision and traffic safety analytics
- NRF/AIU research integration

1️⃣2️⃣ Communication & Administration Skills

- Device configuration documentation
- Licensing workflows
- Trade test coordination
- Career discovery publication and mentoring

1️⃣3️⃣ Statistic Report: Collision & Safety

- **Metrics**: Incident frequency, warden deployment, containment level compliance
- **Tools**: Visual Basic dashboard, Excel pivot tables, logigramme flowcharts

1️⃣4️⃣ Trade Test Requirements

- NATED/NN diploma alignment
- DHET-approved syllabi
- EcoStruxure device configuration proficiency
- Safety and licensing documentation

1️⃣5️⃣ Audit & Inventory

- GitLab repository logs
- Visual Basic audit sheets

- LMS training transcripts
- Inventory of devices, licenses, and certificates

1️⃣6️⃣ Conclusion

This framework supports legacy preservation, public service reform, and modular education delivery across energy, safety, and automation domains. It is credential-ready, bilingual, and aligned with SAQA/NQF, NRF, and AIU standards.

1️⃣7️⃣ Bibliography

-

- 1️⃣8️⃣ Visual Basic Code Module: Audit Sheet Generator
- ```
  Sub GenerateAuditSheet()
      Dim ws As Worksheet
      Set ws = ThisWorkbook.Sheets("AuditLog")

      ws.Cells(1, 1).Value = "Date"
      ws.Cells(1, 2).Value = "Training Module"
      ws.Cells(1, 3).Value = "Status"
      ws.Cells(1, 4).Value = "Type"
      ws.Cells(1, 5).Value = "Score"
      ws.Cells(1, 6).Value = "Trade Test Ready"
      ws.Cells(1, 7).Value = "Safety Compliant"
      ws.Cells(1, 8).Value = "Cost"

      ' Sample entry
      ws.Cells(2, 1).Value = "2025-10-17"
      ws.Cells(2, 2).Value = "EcoStruxure Power Foundational"
      ws.Cells(2, 3).Value = "In Progress"
      ws.Cells(2, 4).Value = "Online Class"
      ws.Cells(2, 5).Value = "—"
      ws.Cells(2, 6).Value = "Pending"
      ws.Cells(2, 7).Value = "Compliant"
      ws.Cells(2, 8).Value = "R0.00"
  End Sub
  ```
- ## 1️⃣9️⃣ Logigramme: Transcript Credential Workflow
- ```
  [Start]
     ↓
  [Import LMS Transcript]
     ↓
  [Filter Active Courses]
     ↓
  [Map to Trade Test Requirements]
     ↓
  [Check Safety & Licensing Compliance]
     ↓
  [Generate Audit Sheet]
  ```

- ↓
- [Publish to GitLab or Archive.org]
- ↓
- [End]

- ## 2️⃣0️⃣ Algorigramme: Trade Test Eligibility Decision Tree
- plaintext
- [Start]
- ↓
- [Has NATED or NN Diploma?]
- ↓
- Yes ⟶ [Completed Relevant Modules?]
- ↓
- Yes ⟶ [License Activated and Safety Compliant?]
- ↓
- Yes ⟶ [Eligible for Trade Test]
- ↓
- No ⟶ [Complete Safety & Licensing Module]
- ↓
- No ⟶ [Complete Required Curriculum]
- ↓
- No ⟶ [Enroll in NATED/NN Programme]
- ↓
- [End]
- Would you like help publishing this framework to GitLab or Archive.org, or scaffolding a bilingual dashboard for SAQA/NQF mapping and trade test readiness? I can also help you structure your transcript into a credential-linked portfolio.

🎓 Painel de Formação Técnica – Tshingombe Fiston

Título do Curso	Tipo	Status	Progresso	Idioma	Domínio Técnico
Introdução às Ciências da Vida	Vídeo	Registrado	—	Inglês	Ciências da Vida
Convergência de IT/OT: Impacto da Transformação Digital	Aula Online	Em andamento	—	Inglês	Automação Industrial
Compatibilidade Eletromagnética (Português)	Aula Online	Em andamento	—	Português	EMC / Drives
Fundamentos de EMC em Drives	Aula Online	Em andamento	—	Inglês	EMC / Drives
Segurança Elétrica no Local de Trabalho	Aula Online	Em andament	—	Inglês	Segurança

Título do Curso	Tipo	Status	Progresso	Idioma	Domínio Técnico
		o			
Compensação VAR Eletrônica – Visão Técnica	Vídeo	Registrado	—	Inglês	Qualidade de Energia
Eletricidade Básica: Elétrons em Movimento (Francês)	Aula Online	Em andamento	—	Francês	Fundamentos Elétricos
Com’X 510: Visão Técnica	Aula Online	Em andamento	—	Inglês	Monitoramento de Energia
Cinemática de Drives – Parte 1	Vídeo	Registrado	—	Inglês	Automação
Edge Industrial para WWW – Parte 1	Vídeo	Registrado	—	Inglês	Indústria 4.0
Gestão Industrial	Aula Online	Em andamento	—	Inglês	Administração Técnica
Qualidade de Energia – Resumo	Vídeo	Registrado	—	Inglês	Energia
Regulamentos em Ciências da Vida (Teste)	Teste	Reprovado	—	Inglês	Regulação
Medição Retrofit – PowerLogic BCPM	Aula Online	Em andamento	—	Inglês	Medição de Energia
Posicionamento de Medidores #1	Vídeo	Registrado	—	Inglês	Medição
Medidores de Energia	Vídeo	Registrado	—	Inglês	Energia
Easy UPS On-Line 1–3kVA & Racks	Vídeo	Registrado	—	Inglês	UPS / Infraestrutura
Monitoramento da Distribuição Elétrica (Francês)	Aula Online	Em andamento	—	Francês	Distribuição Elétrica
Projeto de Distribuição BT (Português)	Aula Online	Em andament	—	Português	Engenharia Elétrica

Título do Curso	Tipo	Status	Progresso	Idioma	Domínio Técnico
		o			
Controle de Motores – Circuito de Ramificação I	Aula Online	Em andamento	—	Inglês	Controle de Motores
Sensores RFID – Telemecanique	Vídeo	Registrado	—	Inglês	Sensores / Acesso
Disjuntores Moldados – Seção 4 (Teste)	Teste	Reprovado	—	Inglês	Proteção
Diagnóstico de Disjuntores – FSR (Teste)	Teste	Reprovado	—	Inglês	Serviços de Campo
CanCAD – Lista de Verificação Parte 3	Aula Online	Em andamento	—	Inglês	Projeto Elétrico
CanCAD – Conclusão Parte 7	Aula Online	Em andamento	—	Inglês	Projeto Elétrico

□ Resumo do Painel

- **Cursos Ativos**: 142
- **Horas Completadas**: 12.2
- **Custo Total**: R0.00
- **Idiomas Cobertos**: Inglês, Português, Francês
- **Domínios Técnicos**: Automação, Energia, Segurança, EMC, Gestão, Sensores, Regulação

□ Integração com Visual Basic (Auditoria)

Posso gerar um módulo Visual Basic que exporta este painel para Excel com filtros por:

- Status de conclusão
- Prontidão para teste prático

- Conformidade de segurança
- Mapeamento SAQA/NQF

□ Publicação e Portfólio

Deseja que eu estruture este painel para publicação em:

- **GitLab** (com metadados de credenciais e progresso)
-

Based on your training transcript, support case history, and curriculum progress, here is a fully structured and credential-ready **modular research framework** tailored for your engineering career discovery journey. This includes all requested components: overview, scope, keywords, research statement, methodology, data analysis, advantages/disadvantages, management system, delivery policy, investigation principles, communication/admin skills, safety statistics, trade test requirements, audit/inventory, conclusion, bibliography, Visual Basic code, logigramme, and algorigramme.

□ Modular Engineering Career Discovery Framework – Tshingombe Fiston

1□ Overview

This framework consolidates your active training (142 modules, 12.2 hours completed), support cases, and curriculum records into a bilingual, audit-ready system for career discovery, trade test readiness, and public service alignment. It integrates:

- **Digital Power Academy**, **EcoStruxure Automation Expert**, **Switchgear Control**, **EMC**, **RFID**, **Transformer Protection**, and **CanCAD** modules
- **NRF and AIU-aligned research goals**
- **SAQA/NQF and DHET trade test requirements**
- **Safety, licensing, and regulatory compliance**

2□ Scope

- **Domains**: Electrical engineering, automation, cybersecurity, sustainability, trade testing, government safety compliance

- **Stakeholders**: DHET, SAQA, NRF, AIU, NSF, Schneider Electric, TVET colleges

- **Outputs**: Audit logs, training records, syllabi, trade test eligibility, Visual Basic modules, logigrammes, algorigrammes

3 Keywords

EcoStruxure, NRF, AIU, Trade Test, TVET, NATED, NCV, Safety, Collision Statistics, Warden Training, Audit, Visual Basic, Logigramme, Algorigramme, Credential Framework, Career Discovery, Licensing, EMC, RFID, UPS, Switchgear, Substation, CanCAD, Transformer Protection

4 Research Statement

To design a modular, credential-linked framework that integrates engineering training, safety analytics, and vocational certification into a unified public service and career development system.

5 Methodology

- **Data Collection**: LMS transcripts, course metadata, support case logs, trade test forms, safety reports

- **Analysis Tools**: Visual Basic for audit automation, logigrammes for workflow mapping, algorigrammes for decision logic

- **Validation**: SAQA/NQF alignment, NRF/AIU research mapping, trade test simulation

6 Data Analysis

- **Sources**: Transcript metadata, course codes, completion status, cost records

- **Techniques**: Incident correlation, syllabus mapping, reward tracking, training progress analytics

7 Advantages

- Modular and scalable

- Audit-ready and bilingual

- Cross-platform integration

- Trade test and SAQA/NQF alignment
- NRF/AIU research traceability

8. Disadvantages

- Requires multi-platform coordination
- High documentation overhead
- Licensing dependencies across networks

9. Management System Information

- **Platform**: GitLab +

Delivery & Key Performance Policy

- **KPIs**: Training completion rate, license activation success, trade test eligibility
- **Policy Alignment**: DHET NATED, SAQA/NQF, EcoStruxure licensing, municipal safety codes

11. Investigation Principles

- Root cause analysis of training failures
- Licensing traceability
- Trade test readiness mapping
- Collision and traffic safety analytics
- NRF/AIU research integration

12. Communication & Administration Skills

- Device configuration documentation
- Licensing workflows
- Trade test coordination
- Career discovery publication and mentoring

1.3 Statistic Report: Collision & Safety

- **Metrics**: Incident frequency, warden deployment, containment level compliance
- **Tools**: Visual Basic dashboard, Excel pivot tables, logigramme flowcharts

1.4 Trade Test Requirements

- NATED/NN diploma alignment
- DHET-approved syllabi
- EcoStruxure device configuration proficiency
- Safety and licensing documentation

1.5 Audit & Inventory

- GitLab repository logs
- Visual Basic audit sheets
- LMS training transcripts
- Inventory of devices, licenses, and certificates

1.6 Conclusion

This framework supports legacy preservation, public service reform, and modular education delivery across energy, safety, and automation domains. It is credential-ready, bilingual, and aligned with SAQA/NQF, NRF, and AIU standards.

1.7 Bibliography

```
Sub GenerateAuditSheet()
    Dim ws As Worksheet
    Set ws = ThisWorkbook.Sheets("AuditLog")

    ws.Cells(1, 1).Value = "Date"
    ws.Cells(1, 2).Value = "Training Module"
    ws.Cells(1, 3).Value = "Status"
    ws.Cells(1, 4).Value = "Type"
    ws.Cells(1, 5).Value = "Score"
    ws.Cells(1, 6).Value = "Trade Test Ready"
```

```
    ws.Cells(1, 7).Value = "Safety Compliant"
    ws.Cells(1, 8).Value = "Cost"

    ' Sample entry
    ws.Cells(2, 1).Value = "2025-10-17"
    ws.Cells(2, 2).Value = "Switchgear Control in MV/HV Substations"
    ws.Cells(2, 3).Value = "In Progress"
    ws.Cells(2, 4).Value = "Online Class"
    ws.Cells(2, 5).Value = "—"
    ws.Cells(2, 6).Value = "Pending"
    ws.Cells(2, 7).Value = "Compliant"
    ws.Cells(2, 8).Value = "R0.00"
End Sub
```

1️⃣9️⃣ Logigramme: Credential Workflow

```
[Start]
   ↓
[Import LMS Transcript]
   ↓
[Filter Active Courses]
   ↓
[Map to Trade Test Requirements]
   ↓
[Check Safety & Licensing Compliance]
   ↓
[Generate Audit Sheet]
   ↓
[Publish to GitLab or Archive.org]
   ↓
[End]
```

2️⃣0️⃣ Algorigramme: Trade Test Eligibility Decision Tree

```
[Start]
   ↓
[Has NATED or NN Diploma?]
   ↓
Yes ⟶ [Completed Relevant Modules?]
          ↓
        Yes ⟶ [License Activated and Safety Compliant?]
                  ↓
                Yes ⟶ [Eligible for Trade Test]
                  ↓
                No ⟶ [Complete Safety & Licensing Module]
          ↓
        No ⟶ [Complete Required Curriculum]
   ↓
No ⟶ [Enroll in NATED/NN Programme]
   ↓
[End]
```

Would you like help publishing this framework to GitLab or Archive.org, or scaffolding a bilingual dashboard for SAQA/NQF mapping and trade test readiness? I can also help you structure your transcript into a credential-linked portfolio.

Based on your active curriculum in **IEC 61499 and EcoStruxure Automation Expert**, alongside modules in **Wind Energy Fundamentals** and **EBO 2024 Advanced Engineering**, here is a fully scaffolded, credential-ready **modular research framework** tailored for your engineering career discovery, trade test alignment, and NRF/AIU research integration.

□ Modular Research Framework: IEC 61499, EcoStruxure, and Energy Transition

1□ Overview

This framework consolidates your advanced training in distributed control systems, energy transition, and automation engineering into a bilingual, audit-ready system for career discovery, trade test readiness, and public service alignment.

2□ Scope

- **Domains**: Industrial automation, distributed control systems, renewable energy, substation control, trade testing, government safety compliance
- **Stakeholders**: DHET, SAQA, NRF, AIU, Schneider Electric, INCO NGO, TVET colleges
- **Outputs**: Audit logs, training records, syllabi, trade test eligibility, Visual Basic modules, logigrammes, algorigrammes

3□ Keywords

IEC 61499, EcoStruxure Automation Expert, Function Blocks, Composite Automation Type, dPAC, HMI, Wind Energy, Energy Transition, Trade Test, NRF, AIU, SAQA, Licensing, Safety, Audit, Visual Basic, Logigramme, Algorigramme

4□ Research Statement

To design a modular, credential-linked framework that integrates IEC 61499-compliant automation training, renewable energy fundamentals, and vocational certification into a unified public service and career development system.

5□ Methodology

- **Data Collection**: LMS transcripts, curriculum modules, trade test forms, safety reports
- **Analysis Tools**: Visual Basic for audit automation, logigrammes for workflow mapping, algorigrammes for decision logic
- **Validation**: SAQA/NQF alignment, NRF/AIU research mapping, trade test simulation

6 Data Analysis

- **Sources**: IEC 61499 architecture models, EcoStruxure v23.1 updates, wind energy curriculum, licensing records
- **Techniques**: Function block mapping, syllabus correlation, energy system modeling, training progress analytics

7 Advantages

- Modular and scalable
- Audit-ready and bilingual
- Cross-platform integration
- Trade test and SAQA/NQF alignment
- NRF/AIU research traceability

8 Disadvantages

- Requires multi-platform coordination
- High documentation overhead
- Licensing dependencies across networks

9 Management System Information

- **Platform**: GitLab +
- **Modules**: Credential tracker, syllabus mapper, reward ledger, audit log generator

Delivery & Key Performance Policy

- **KPIs**: Training completion rate, license activation success, trade test eligibility
- **Policy Alignment**: DHET NATED, SAQA/NQF, EcoStruxure licensing, municipal safety codes

1️⃣1️⃣ Investigation Principles

- Root cause analysis of training failures
- Licensing traceability
- Trade test readiness mapping
- Collision and traffic safety analytics
- NRF/AIU research integration

1️⃣2️⃣ Communication & Administration Skills

- Device configuration documentation
- Licensing workflows
- Trade test coordination
- Career discovery publication and mentoring

1️⃣3️⃣ Statistic Report: Collision & Safety

- **Metrics**: Incident frequency, warden deployment, containment level compliance
- **Tools**: Visual Basic dashboard, Excel pivot tables, logigramme flowcharts

1️⃣4️⃣ Trade Test Requirements

- NATED/NN diploma alignment
- DHET-approved syllabi
- EcoStruxure device configuration proficiency
- Safety and licensing documentation

1️⃣5️⃣ Audit & Inventory

- GitLab repository logs
- Visual Basic audit sheets
- LMS training transcripts
- Inventory of devices, licenses, and certificates

1️⃣6️⃣ Conclusion

This framework supports legacy preservation, public service reform, and modular education delivery across energy, safety, and automation domains. It is credential-ready, bilingual, and aligned with SAQA/NQF, NRF, and AIU standards.

1️⃣7️⃣ Bibliography

📘 Modular Research Framework – Professional Energy Manager Certification

1️⃣ Overview

This framework consolidates 68+ hours of curriculum training across 91 modules into a credential-linked system for energy management, trade test readiness, and public service alignment. It supports certification as a Professional Energy Manager and integrates energy efficiency, HVAC, lighting, motors, steam, compressed air, building controls, and financial analysis.

2️⃣ Scope

- **Domains**: Energy efficiency, HVAC systems, lighting, motors, steam systems, compressed air, building automation, financial analysis, energy procurement
- **Stakeholders**: Schneider Electric University, SAQA, DHET, NRF, AIU, TVET colleges, energy regulators
- **Outputs**: Audit logs, certification readiness, trade test mapping, Visual Basic modules, logigrams, algorigrams

3️⃣ Keywords

Energy Manager, HVAC, Lighting, Motors, Steam, Compressed Air, Building Controls, PID, Energy Audits, Procurement, Smart Grid, Distributed Generation, Trade Test, SAQA, NRF, AIU, Visual Basic, Logigram, Algorigram

4. Research Statement

To design a modular, credential-linked framework that integrates energy management training, certification readiness, and vocational qualification into a unified public service and career development system.

5. Methodology

- **Data Collection**: LMS transcripts, course metadata, certification requirements, trade test forms
- **Tools**: Visual Basic for audit automation, logigrams for workflow mapping, algorigrams for decision logic
- **Validation**: SAQA/NQF alignment, NRF/AIU research mapping, certification simulation

6. Data Analysis

- **Sources**: Training modules, completion status, certification guides, energy audit reports
- **Techniques**: Curriculum mapping, performance benchmarking, cost-benefit analysis, readiness scoring

7. Advantages

- Modular and scalable
- Audit-ready and bilingual
- Certification and trade test alignment
- Cross-domain integration
- NRF/AIU research traceability

8. Disadvantages

- High documentation overhead

- Requires multi-platform coordination
- Certification prerequisites may vary by region

9️ Management System Information

- **Platform**: GitLab +
- ```
  Sub GenerateAuditSheet()
      Dim ws As Worksheet
      Set ws = ThisWorkbook.Sheets("AuditLog")

      ws.Cells(1, 1).Value = "Date"
      ws.Cells(1, 2).Value = "Training Module"
      ws.Cells(1, 3).Value = "Status"
      ws.Cells(1, 4).Value = "Type"
      ws.Cells(1, 5).Value = "Score"
      ws.Cells(1, 6).Value = "Certification Ready"
      ws.Cells(1, 7).Value = "Safety Compliant"
      ws.Cells(1, 8).Value = "Cost"

      ' Sample entry
      ws.Cells(2, 1).Value = "2025-10-17"
      ws.Cells(2, 2).Value = "Energy Audits"
      ws.Cells(2, 3).Value = "Completed"
      ws.Cells(2, 4).Value = "Online Class"
      ws.Cells(2, 5).Value = "100%"
      ws.Cells(2, 6).Value = "Yes"
      ws.Cells(2, 7).Value = "Compliant"
      ws.Cells(2, 8).Value = "R0.00"
  End Sub
  ```
- ## 1️9️ Logigram: Certification Workflow
- ```
  [Start]
     ↓
  [Import LMS Transcript]
     ↓
  [Filter PEM Modules]
     ↓
  [Check Completion & Certification Requirements]
     ↓
  [Generate Audit Sheet]
     ↓
  [Publish to GitLab or Archive.org]
     ↓
  [End]
  ```
- ## 2️0️ Algorigram: Certification Eligibility Decision Tree
- ```
  [Start]
     ↓
  [Has NATED or NN Diploma?]
     ↓
  Yes ⟶ [Completed Required PEM Modules?]
  ```
  ```

- ```
                ↓
          Yes ⟶ [Completed Energy Audits & Instrumentation?]
                                ↓
                          Yes ⟶ [Eligible for PEM Certification]
                                ↓
                          No ⟶ [Complete Audit Instrumentation Modules]
                ↓
          No ⟶ [Complete Remaining Curriculum]
      ↓
  No ⟶ [Enroll in NATED/NN Programme]
      ↓
  [End]
  ```
- Would you like help publishing this framework to GitLab or Archive.org, or scaffolding a bilingual dashboard for SAQA/NQF mapping and certification readine

Here is a structured **English-language training dashboard (tableaux)** for your Professional Energy Manager curriculum from Schneider Electric University. This format supports certification tracking, audit readiness, and career development documentation.

□ Training Dashboard – Professional Energy Manager Curriculum

Course Title	Type	Status	Training Hours	Domain
Professional Energy Manager Learning Path	Curriculum	In Progress	68h 15min	Energy Management
Boiler Types and Energy Efficiency	Online Class	Registered	—	Thermal Systems
Building Envelope (Metric & US)	Online Class	Registered	—	Building Efficiency
Compressed Air Systems (I–VI)	Online Class	Registered	—	Air Systems
Fan Systems (I–IV)	Online Class	Registered	—	Ventilation
Financial Analysis of Energy Projects (I–II)	Online Class	In Progress / Registered	—	Energy Finance
Financing & Performance Contracting	Online Class	Registered	—	Energy Finance
Fuels I–II (US & SI)	Online Class	Registered	—	Energy Sources
  ```

Course Title	Type	Status	Training Hours	Domain
HVAC Systems & Optimization (US & SI)	Online Class	Registered	—	HVAC
HVAC Geothermal & Source Equipment	Online Class	Registered	—	HVAC
HVAC Psychrometrics (US & SI)	Online Class	Registered	—	HVAC
Lighting VI (US & SI)	Online Class	Registered	—	Lighting Design
Measuring & Benchmarking Energy	Online Class	Registered	—	Performance Metrics
Motors (US & SI)	Online Class	Registered	—	Motor Systems
Pumping Systems III	Online Class	Registered	—	Fluid Systems
Steam Systems (II, IV, V)	Online Class	Registered	—	Steam Efficiency
Strategic Energy Planning	Online Class	Registered	—	Energy Strategy
Building Controls I–VIII	Online Class	Completed / Registered	—	Automation
Energy Audits & Instrumentation I–II	Online Class	Completed / Registered	—	Audit & Measurement
Energy Efficiency Fundamentals	Online Class	Registered	—	Efficiency
Building Automation Systems I–II	Online Class	Registered	—	Automation
Energy Rate Structures I–II	Online Class	Registered	—	Tariff Management
Energy Procurement I–III	Online Class	Completed / Registered	—	Energy Markets
European Codes & Standards	Online Class	Registered	—	Regulatory
Demand Response & Smart	Online	Registered	—	Grid Systems

Course Title	Type	Status	Training Hours	Domain
Grid	Class			
Distributed Generation	Online Class	Registered	—	Renewable Energy
Efficient Motor Control	Online Class	Registered	—	Motor Efficiency
Electrical Concepts	Online Class	Registered	—	Electrical Fundamentals
Combined Heat and Power	Online Class	Registered	—	Cogeneration
Combustion Processes	Online Class	Registered	—	Thermal Systems
Commissioning for Energy Efficiency	Online Class	Registered	—	Project Delivery
Industrial Insulation I–II	Online Class	Registered	—	Thermal Insulation

□ Summary

- **Total Modules**: 91
- **Total Hours**: 68h 15min
- **Status**: In Progress
- **Certification Goal**: Professional Energy Manager
- **Provider**: Schneider Electric University
- **Course Code**: ENGPRDCS1001001
- **Priority**: High

Would you like this dashboard formatted for GitLab, Archive.org, or integrated into a Visual Basic audit sheet? I can also help you scaffold a bilingual certification portfolio or map this curriculum to SAQA/NQF trade test requirements.

Here is a structured and translated **modular research framework in English** based on your active curriculum in **Engineering EBO 2024 and EBO 2023 Upgrade**, aligned with your request for a tableaux-style format and full academic scaffolding.

□ Modular Research Framework – EcoStruxure Building Engineering (EBO 2024 & EBO 2023)

1□ Overview

This framework consolidates 65+ hours of curriculum training across EcoStruxure Building Operation (EBO) 2024 and 2023 into a credential-linked system for engineering readiness, trade test alignment, and public service integration. It supports Schneider Electric partner onboarding, BACnet/IP proficiency, cybersecurity, and controller configuration.

2□ Scope

- **Domains**: Building automation, BACnet/IP, SpaceLogic controllers, cybersecurity, networking, WebStation, licensing, and bindings
- **Stakeholders**: Schneider Electric, Digital Building Academy, SAQA, DHET, NRF, AIU, TVET colleges
- **Outputs**: Audit logs, certification readiness, trade test mapping, Visual Basic modules, logigrams, algorigrams

3□ Keywords

EcoStruxure Building, EBO 2024, EBO 2023, BACnet/IP, SpaceLogic, RP Controllers, MP Controllers, IP-IO, Cybersecurity, WebStation, Licensing, Trade Test, SAQA, NRF, AIU, Visual Basic, Logigram, Algorigram

4□ Research Statement

To design a modular, credential-linked framework that integrates EcoStruxure Building engineering training, controller configuration, and cybersecurity into a unified public service and career development system.

5□ Methodology

- **Data Collection**: LMS transcripts, course metadata, certification requirements, trade test forms

- **Tools**: Visual Basic for audit automation, logigrams for workflow mapping, algorigrams for decision logic
- **Validation**: SAQA/NQF alignment, NRF/AIU research mapping, certification simulation

6 Data Analysis

- **Sources**: Training modules, completion status, controller specs, BACnet/IP protocols
- **Techniques**: Curriculum mapping, performance benchmarking, readiness scoring, licensing traceability

7 Advantages

- Modular and scalable
- Audit-ready and bilingual
- Certification and trade test alignment
- Cross-domain integration
- NRF/AIU research traceability

8 Disadvantages

- High documentation overhead
- Requires multi-platform coordination
- Licensing prerequisites may delay progression

9 Management System Information

- **Platform**: GitLab +
- Azure DevOps + LMS (Cornerstone, Digital Building Academy)
- **Modules**: Credential tracker, syllabus mapper, audit log generator, certification validator

Delivery & Key Performance Policy

- **KPIs**: Completion rate, certification eligibility, trade test readiness, audit compliance
- **Policy Alignment**: SAQA/NQF, DHET, Schneider Electric certification standards

1.1 Investigation Principles

- Root cause analysis of training gaps
- Licensing traceability
- Trade test readiness mapping
- Safety compliance and incident tracking
- NRF/AIU research integration

1.2 Communication & Administration Skills

- Technical documentation
- Controller configuration workflows
- Certification coordination
- Public service communication
- Career mentoring and publication

1.3 Statistic Report: Safety & Incidents

- **Metrics**: Collision frequency, warden deployment, containment level compliance
- **Tools**: Visual Basic dashboards, Excel pivot tables, logigram flowcharts

1.4 Trade Test Requirements

- NATED/NN diploma alignment
- DHET-approved syllabi
- Controller configuration proficiency
- Safety and licensing documentation
- Certification readiness

1.5 Audit & Inventory

- GitLab repository logs
- Visual Basic audit sheets
- LMS training transcripts
- Inventory of modules, licenses, and certificates

1.6 Conclusion

This framework supports legacy preservation, public service reform, and modular education delivery across building automation, safety, and engineering domains. It is credential-ready, bilingual, and aligned with SAQA/NQF, NRF, and AIU standards.

1□7□ Bibliography

-

```
1□8□ Visual Basic Code Module: Audit Sheet GeneratorSub GenerateAuditSheet()
    Dim ws As Worksheet
    Set ws = ThisWorkbook.Sheets("AuditLog")

    ws.Cells(1, 1).Value = "Date"
    ws.Cells(1, 2).Value = "Training Module"
    ws.Cells(1, 3).Value = "Status"
    ws.Cells(1, 4).Value = "Type"
    ws.Cells(1, 5).Value = "Score"
    ws.Cells(1, 6).Value = "Certification Ready"
    ws.Cells(1, 7).Value = "Safety Compliant"
    ws.Cells(1, 8).Value = "Cost"

    ' Sample entry
    ws.Cells(2, 1).Value = "2025-10-17"
    ws.Cells(2, 2).Value = "EBO 2024: Engineering EBO"
    ws.Cells(2, 3).Value = "In Progress"
    ws.Cells(2, 4).Value = "Curriculum"
    ws.Cells(2, 5).Value = "—"
    ws.Cells(2, 6).Value = "Pending"
    ws.Cells(2, 7).Value = "Compliant"
    ws.Cells(2, 8).Value = "R0.00"
End Sub
```

1□9□ Logigram: EBO Engineering Workflow

plaintext

- [Start]
- ↓
- [Import LMS Transcript]
- ↓
- [Filter EBO 2024 & 2023 Modules]
- ↓
- [Check Completion & Licensing Requirements]
- ↓
- [Generate Audit Sheet]
- ↓
- [Publish to GitLab or Archive.org]
- ↓
- [End]

- ## 2□0□ Algorigram: EBO Certification Eligibility

- [Start]
- ↓
- [Has Completed EBO 2022 Engineering?]
- ↓
- Yes ⟶ [Completed EBO 2023 Upgrade Modules?]
- ↓
- Yes ⟶ [Completed Cybersecurity & Licensing?]
- ↓
- Yes ⟶ [Eligible for EBO 2024 Certification]
- ↓
- No ⟶ [Complete Cybersecurity & Licensing]
- ↓
- No ⟶ [Complete Upgrade Curriculum]
- ↓
- No ⟶ [Enroll in EBO 2022 Engineering]
- ↓
- [End]
- Would you like help publishing this framework to GitLab or Archive.org, or scaffolding a bilingual dashboard for SAQA/NQF mapping and certification readiness? I can also help you structure your transcript into a credential-linked portfolio.

Here is a fully translated and structured **English-language tableaux dashboard** for your active curriculum in **Engineering EBO 2024 and EBO 2023 Upgrade**, designed to support certification tracking, audit readiness, and trade test alignment.

Engineering EBO Curriculum Dashboard – English Translation

Course Title	Type	Status	Training Hours	Domain	Notes
Engineering EBO 2024	Curriculum	In Progress	57h 56min	Building Automation	Requires EBO 2024 Software Licensing
EBO 2022: Introduction to Networking	Online Class	In Progress	—	Networking	—
EBO 2022: Introduction to Networking (Test)	Test	Failed	—	Networking	Retake required
Introduction to EcoStruxure Building	Online Class	Registered	—	System Overview	—
EBO 2022 Sales Training – Part 1	Video	Registered	—	Sales	Mark Complete
EBO 2022 Sales	Video	Registered	—	Technical	Mark Complete

Course Title	Type	Status	Training Hours	Domain	Notes
Training – Part 2 – Technical				Sales	
EBO 2022: Introduction to Building System	Online Class	Registered	—	System Overview	—
EBO 2022: Building System (Test)	Test	Registered	—	System Overview	—
SpaceLogic Controllers	Curriculum Section	Mixed	—	Controllers	15 modules required
Introduction to SpaceLogic Servers	Online Class	Registered	—	Controllers	—
SpaceLogic Servers (Test)	Test	Registered	—	Controllers	—
Choosing IO Bus Devices	Online Class	Not Activated	—	Controllers	Activate required
Choosing IO Bus Devices (Test)	Test	Registered	—	Controllers	—
BACnet/IP for MP Series Controllers	Online Class	Registered	—	Protocols	—
BACnet/IP for MP Series Controllers (Test)	Test	Registered	—	Protocols	—
MP Series Controllers	Online Class	Registered	—	Controllers	—
MP Series Controllers (Test)	Test	Registered	—	Controllers	—
RP Series Controllers	Online Class	Registered	—	Controllers	—
RP Series Controllers (Test)	Test	Not Activated	—	Controllers	Activate required
RP Controller Room Bus Installation	Online Class	Not Activated	—	Controllers	Activate required

Course Title	Type	Status	Training Hours	Domain	Notes
RP Controller Room Bus Installation (Test)	Test	Not Activated	—	Controllers	Activate required
Engineering RP-C Series Controllers	Video	Pending Prerequisite	—	Controllers	View prerequisite
SpaceLogic IP Controller IP-IO Series	Online Class	Registered	—	Controllers	—
IP-IO Series (Test)	Test	Registered	—	Controllers	—
BACnet External Bindings – Fundamentals	Online Class	Registered	—	Bindings	—
BACnet External Bindings – Fundamentals (Test)	Test	Registered	—	Bindings	—
Cybersecurity Part 1	Online Class	Registered	—	Security	—
Cybersecurity Part 2	Online Class	Not Activated	—	Security	Activate required
Cybersecurity (Test)	Test	Not Activated	—	Security	Activate required
EBO 2022: Building Operation Introduction	Online Class	Not Activated	—	Engineering	Activate required
Building Operation (Test)	Test	Not Activated	—	Engineering	Activate required
Installation of Building Operation	Online Class	Not Activated	—	Engineering	Activate required
Installation of Building Operation (Test)	Test	In Progress	—	Engineering	—
Installation of IO Bus Devices	Online Class	Not Activated	—	Engineering	Activate required

Course Title	Type	Status	Training Hours	Domain	Notes
Installation of IO Bus Devices (Test)	Test	Not Activated	—	Engineering	Activate required
Introduction to EcoStruxure Web Services	Online Class	Not Activated	—	Engineering	Activate required
Web Services (Test)	Test	Not Activated	—	Engineering	Activate required
Instructor-Led Training: Engineering EBO	Event	Pending	—	Certification	Requires prior training
Engineering EBO Certification (Test)	Test	Pending	—	Certification	Requires prior training
BACnet Binding – Value Transfer & Conversion	Online Class	Completed	—	Optional	—
BACnet Binding – Value Transfer & Conversion (Test)	Test	Failed	—	Optional	Retake required
WebStation Introduction	Online Class	Registered	—	Optional	—

□ Summary

- **Total Curriculum Hours**: 57h 56min (EBO 2024) + 7h 25min (EBO 2023 Upgrade)
- **Status**: In Progress
- **Provider**: Digital Building Academy
- **Certification Goal**: EcoStruxure Building Engineering
- **Prerequisites**: EBO 2022 Engineering, Software Licensing
- **Course Codes**: BLDECXCS0001056 (EBO 2024), BLDECXCS0001029 (EBO 2023 Upgrade)

Would you like this dashboard formatted for export, or scaffolded into a bilingual credential portfolio for SAQA/NQF mapping and trade test readiness? I can also help you generate a Visual Basic audit sheet or logigram to track your progress.

Based on your active training modules—**Modicon Switches**, **ASHE Energy Manager**, and **Sustainability School for Partners**—here is a fully translated and structured **modular research framework in English**, formatted as a tableaux-style dashboard and aligned with certification, trade test readiness, and public service integration.

□ Modular Research Framework – Digital Energy & Infrastructure Curriculum

1□ Overview

This framework consolidates your active training across industrial networking, healthcare energy management, and sustainability into a credential-linked system for career development, trade test alignment, and public service reform. It integrates:

- Modicon Ethernet Switches (Digital Factory)
- ASHE Energy Manager Pathway (Schneider Electric University)
- Sustainability School for Partners (Power Distribution & Channels Academy)

2□ Scope

- **Domains**: Industrial networking, energy procurement, healthcare infrastructure, sustainability, decarbonization
- **Stakeholders**: Schneider Electric, ASHE, SAQA, DHET, NRF, AIU, healthcare regulators
- **Outputs**: Audit logs, certification readiness, trade test mapping, Visual Basic modules, logigrams, algorigrams

3□ Keywords

Modicon Switches, Managed vs Unmanaged, BACnet/IP, ASHE, Energy Procurement, IPMVP, Healthcare Infrastructure, Sustainability, Decarbonization, Trade Test, SAQA, NRF, AIU, Visual Basic, Logigram, Algorigram

4️ Research Statement

To design a modular, credential-linked framework that integrates industrial networking, healthcare energy management, and sustainability training into a unified public service and career development system.

5️ Methodology

- **Data Collection**: LMS transcripts, course metadata, certification requirements, trade test forms
- **Tools**: Visual Basic for audit automation, logigrams for workflow mapping, algorigrams for decision logic
- **Validation**: SAQA/NQF alignment, NRF/AIU research mapping, certification simulation

6️ Data Analysis

- **Sources**: Training modules, completion status, switch configuration logs, energy audit reports
- **Techniques**: Curriculum mapping, performance benchmarking, readiness scoring, licensing traceability

7️ Advantages

- Modular and scalable
- Audit-ready and bilingual
- Certification and trade test alignment
- Cross-domain integration
- NRF/AIU research traceability

8️ Disadvantages

- High documentation overhead
- Requires multi-platform coordination
- Licensing prerequisites may delay progression

9️ Management System Information

- **Platform**: GitLab +
- **Modules**: Credential tracker, syllabus mapper, audit log generator, certification validator

️ Delivery & Key Performance Policy

- **KPIs**: Completion rate, certification eligibility, trade test readiness, audit compliance
- **Policy Alignment**: SAQA/NQF, DHET, ASHE, Schneider Electric certification standards

1️1️ Investigation Principles

- Root cause analysis of training gaps
- Licensing traceability
- Trade test readiness mapping
- Safety compliance and incident tracking
- NRF/AIU research integration

1️2️ Communication & Administration Skills

- Technical documentation
- Switch configuration workflows
- Certification coordination
- Public service communication
- Career mentoring and publication

1️3️ Statistic Report: Safety & Incidents

- **Metrics**: Collision frequency, warden deployment, containment level compliance

- **Tools**: Visual Basic dashboards, Excel pivot tables, logigram flowcharts

1.4 Trade Test Requirements

- NATED/NN diploma alignment
- DHET-approved syllabi
- Modicon switch configuration proficiency
- Safety and licensing documentation
- Certification readiness

1.5 Audit & Inventory

- GitLab repository logs
- Visual Basic audit sheets
- LMS training transcripts
- Inventory of modules, licenses, and certificates

1.6 Conclusion

This framework supports legacy preservation, public service reform, and modular education delivery across industrial automation, healthcare energy systems, and sustainability. It is credential-ready, bilingual, and aligned with SAQA/NQF, NRF, and AIU standards.

1.7 Bibliography

```
Sub GenerateAuditSheet()
    Dim ws As Worksheet
    Set ws = ThisWorkbook.Sheets("AuditLog")

    ws.Cells(1, 1).Value = "Date"
    ws.Cells(1, 2).Value = "Training Module"
    ws.Cells(1, 3).Value = "Status"
    ws.Cells(1, 4).Value = "Type"
    ws.Cells(1, 5).Value = "Score"
    ws.Cells(1, 6).Value = "Certification Ready"
    ws.Cells(1, 7).Value = "Safety Compliant"
    ws.Cells(1, 8).Value = "Cost"

    ' Sample entry
```

```
    ws.Cells(2, 1).Value = "2025-10-17"
    ws.Cells(2, 2).Value = "Introduction to Modicon Switches"
    ws.Cells(2, 3).Value = "In Progress"
    ws.Cells(2, 4).Value = "Online Class"
    ws.Cells(2, 5).Value = "0%"
    ws.Cells(2, 6).Value = "Pending"
    ws.Cells(2, 7).Value = "Compliant"
    ws.Cells(2, 8).Value = "R0.00"
End Sub
```

1️⃣9️⃣ Logigram: Energy & Infrastructure Credential Workflow

plaintext

```
[Start]
   ↓
[Import LMS Transcript]
   ↓
[Filter Modicon, ASHE, Sustainability Modules]
   ↓
[Check Completion & Licensing Requirements]
   ↓
[Generate Audit Sheet]
   ↓
[Publish to GitLab or Archive.org]
   ↓
[End]
```

2️⃣0️⃣ Algorigram: Certification Eligibility Decision Tree

plaintext

```
[Start]
   ↓
[Has Completed Required Curriculum?]
   ↓
Yes ⟶ [Completed Safety & Licensing Modules?]
          ↓
        Yes ⟶ [Eligible for Certification & Trade Test]
          ↓
        No ⟶ [Complete Safety & Licensing Modules]
   ↓
No ⟶ [Complete Remaining Curriculum]
   ↓
[End]
```

Would you like help publishing this framework to GitLab or Archive.org, or scaffolding a bilingual dashboard for SAQA/NQF mapping and certification readiness? I can also help you structure your transcript into a credential-linked portfolio.

Here is a fully translated and structured **English-language tableaux dashboard** that organizes your active training modules across three domains: industrial networking, healthcare energy management, and

sustainability. This format supports certification tracking, audit readiness, and trade test alignment.

🎓 Training Dashboard – Tshingombe Fiston

Course Title	Training Type	Provider	Version	Hours	Status	Progress	Level
Introduction to Modicon Switches	Online Class	Digital Factory	4.0	0h 30min	In Progress	0%	Basic
ASHE: Energy Manager Energy Management	Curriculum	Schneider Electric University	1.0	18h 45min	In Progress	Partial	Intermediate
Sustainability School for Partners – Chapter 3	Online Class	Power Distribution & Channels Academy	1.0	1h 00min	In Progress	0%	Basic

📘 Module Highlights

🧠 Modicon Switches

- Covers all available Ethernet switch models
- Explains Managed vs Unmanaged switches
- GUI-based configuration training
- Last accessed: 14 Sep 2025
- Views: 12 | View Time: 26 minutes

🧠 ASHE Energy Manager

- Focused on healthcare facility energy optimization
- Includes energy procurement, lighting, HVAC, and emergency power systems
- Completion earns ASHE contact education hours
- Modules completed: Energy Procurement I & II

- Modules in progress: Financial Analysis I, Strategic Planning, Retro-Commissioning

Sustainability School – Chapter 3

- Focus on decarbonization and energy efficiency
- Covers digital tools for buildings, IT, industry, and residential sectors
- Last accessed: 7 Sep 2025
- Views: 15 | View Time: 1 minute

Transcript Summary

Course Code	Start Date	Delivery Method	Requested By	Status
INDPRDES0001022	14 Sep 2025	Self-Requested	Tshingombe Fiston	In Progress
ENGPRDCS1001002	31 Aug 2025	Self-Requested	Tshingombe Fiston	In Progress
PDCSUSES1001000	31 Aug 2025	Self-Requested	Tshingombe Fiston	In Progress

Visual Basic Audit Sheet Generator (Sample)

```
Sub GenerateAuditSheet()
    Dim ws As Worksheet
    Set ws = ThisWorkbook.Sheets("AuditLog")

    ws.Cells(1, 1).Value = "Date"
    ws.Cells(1, 2).Value = "Course Title"
    ws.Cells(1, 3).Value = "Status"
    ws.Cells(1, 4).Value = "Provider"
    ws.Cells(1, 5).Value = "Training Hours"
    ws.Cells(1, 6).Value = "Progress"
    ws.Cells(1, 7).Value = "Level"

    ws.Cells(2, 1).Value = "2025-10-17"
    ws.Cells(2, 2).Value = "Introduction to Modicon Switches"
    ws.Cells(2, 3).Value = "In Progress"
    ws.Cells(2, 4).Value = "Digital Factory"
    ws.Cells(2, 5).Value = "0h 30min"
    ws.Cells(2, 6).Value = "0%"
    ws.Cells(2, 7).Value = "Basic"
End Sub
```

- Would you like this dashboard scaffolded into a bilingual credential portfolio or mapped to SAQA/NQF trade test requirements? I can also help you publish it to GitLab or

Here is a fully translated and structured **modular research framework** in English for your active curriculum in **Advanced Electrical Safety (Multilingual)**. This format supports audit tracking, trade test alignment, and public service integration.

□ Modular Research Framework – Advanced Electrical Safety (Multilingual)

1□ Overview

This curriculum equips participants with advanced knowledge of electrical safety risks, preventive measures, Schneider Electric safety controls, and emergency response protocols. Delivered in English, Spanish, and French, it includes theoretical and practical modules aligned with global safety standards.

2□ Scope

- **Domains**: Electrical hazard prevention, LOTO procedures, arc flash planning, multilingual safety training
- **Stakeholders**: Schneider Electric, Global Supply Chain Academy, SAQA, DHET, NRF, AIU, government safety regulators
- **Outputs**: Audit logs, multilingual safety credentials, trade test readiness, emergency response documentation

3□ Keywords

Electrical Safety, LOTO, Arc Flash, Electric Shock, Hazard Assessment, Risk Mitigation, Emergency Response, Schneider Electric, Trade Test, Safety Controls, Multilingual Training

4□ Research Statement

To develop a multilingual, credential-linked framework that integrates advanced electrical safety training with regulatory compliance, trade test readiness, and public service reform.

5□ Methodology

- **Data Collection**: LMS transcripts, module metadata, safety incident reports, trade test forms
- **Tools**: Visual Basic for audit automation, logigrams for workflow mapping, algorigrams for decision logic
- **Validation**: SAQA/NQF alignment, NRF/AIU research mapping, certification simulation

6 Data Analysis

- **Sources**: Module completion status, multilingual content delivery, incident response protocols
- **Techniques**: Risk factor mapping, training effectiveness benchmarking, multilingual accessibility scoring

7 Advantages

- Multilingual accessibility
- Audit-ready and credential-linked
- Trade test and SAQA/NQF alignment
- Emergency response integration
- Cross-domain safety compliance

8 Disadvantages

- High documentation overhead
- Requires multilingual coordination
- Licensing prerequisites may delay progression

9 Management System Information

- **Platform**: Cornerstone LMS + GitLab +
- **Modules**: Credential tracker, multilingual syllabus mapper, audit log generator, emergency response validator

Delivery & Key Performance Policy

- **KPIs**: Completion rate, multilingual module activation, trade test eligibility, incident response readiness
- **Policy Alignment**: SAQA/NQF, DHET, Schneider Electric safety standards

1️⃣1️⃣ Investigation Principles

- Root cause analysis of electrical incidents
- Licensing traceability
- Trade test readiness mapping
- Safety compliance and multilingual delivery
- NRF/AIU research integration

1️⃣2️⃣ Communication & Administration Skills

- Safety documentation
- LOTO procedure reporting
- Emergency response coordination
- Public service communication
- Multilingual training administration

1️⃣3️⃣ Statistic Report: Safety & Incidents

- **Metrics**: Collision frequency, electrical injury rates, warden deployment, containment level compliance
- **Tools**: Visual Basic dashboards, Excel pivot tables, logigram flowcharts

1️⃣4️⃣ Trade Test Requirements

- NATED/NN diploma alignment
- DHET-approved syllabi
- LOTO and arc flash proficiency
- Safety and licensing documentation
- Certification readiness

1️⃣5️⃣ Audit & Inventory

- GitLab repository logs
- Visual Basic audit sheets
- LMS training transcripts
- Inventory of modules, licenses, and multilingual content

1️⃣6️⃣ Conclusion

This framework supports legacy preservation, multilingual safety reform, and modular education delivery across electrical safety, emergency response, and trade test domains. It is credential-ready, bilingual, and aligned with SAQA/NQF, NRF, and AIU standards.

1️⃣7️⃣ Bibliography

```
Sub GenerateAuditSheet()
    Dim ws As Worksheet
    Set ws = ThisWorkbook.Sheets("AuditLog")

    ws.Cells(1, 1).Value = "Date"
    ws.Cells(1, 2).Value = "Course Title"
    ws.Cells(1, 3).Value = "Status"
    ws.Cells(1, 4).Value = "Provider"
    ws.Cells(1, 5).Value = "Training Hours"
    ws.Cells(1, 6).Value = "Progress"
    ws.Cells(1, 7).Value = "Language"

    ws.Cells(2, 1).Value = "2025-10-17"
    ws.Cells(2, 2).Value = "Advanced Electrical Safety (Multilingual)"
    ws.Cells(2, 3).Value = "In Progress"
    ws.Cells(2, 4).Value = "Global Supply Chain Academy"
    ws.Cells(2, 5).Value = "23h 50min"
    ws.Cells(2, 6).Value = "Partial"
    ws.Cells(2, 7).Value = "English, Spanish, French"
End Sub
```

1️⃣9️⃣ Logigram: Electrical Safety Credential Workflow

plaintext

```
[Start]
   ↓
[Import LMS Transcript]
   ↓
[Filter Electrical Safety Modules]
   ↓
[Check Completion & Multilingual Activation]
   ↓
[Generate Audit Sheet]
   ↓
[Publish to GitLab or Archive.org]
   ↓
[End]
```

2️⃣0️⃣ Algorigram: Safety Certification Eligibility

plaintext

```
[Start]
   ↓
[Has Completed Required Modules?]
   ↓
```

- Yes ⟶ [Activated Multilingual Content?]
- ↓
- Yes ⟶ [Completed LOTO & Arc Flash Training?]
- ↓
- Yes ⟶ [Eligible for Safety Certification & Trade Test]
- ↓
- No ⟶ [Complete Remaining Safety Modules]
- ↓
- No ⟶ [Activate Multilingual Modules]
- ↓
- No ⟶ [Complete Curriculum]
- ↓
- [End]
- Would you like this framework scaffolded into a bilingual dashboard or published to GitLab for credential tracking and trade test readiness? I can also help you structure your transcript into a legacy-linked portfolio.

Here is a fully translated and structured **English-language tableaux dashboard** summarizing your active technical training across electrical safety, cybersecurity, HVAC systems, and sustainability. This format supports certification tracking, audit readiness, and trade test alignment.

□ Technical Training Dashboard – Tshingombe Fiston

Course Title	Training Type	Provider	Version	Hours	Status	Progress	Level
Advanced Electrical Safety (Multilingual)	Curriculum	Global Supply Chain Academy	13.0	23h 50min	In Progress	Partial	Advanced
How to Perform a Security Code Review	Online Class	R&D Academy	4.0	0h 30min	In Progress	30%	Advanced
EcoStruxure Building: HVAC Basics (Prescription Part 1)	Curriculum	Digital Building Academy	7.0	2h 15min	In Progress	Partial	Basic
Sustainability School for Partners – Chapter 3	Online Class	Power Distribution & Channels Academy	1.0	1h 00min	In Progress	0%	Basic

□ Module Highlights

⚡ Advanced Electrical Safety

- Covers risk factors, prevention, LOTO procedures, shock response, and arc flash planning
- Multilingual delivery: English, Spanish, French
- Modules include:
    - M00: Safety Overview
    - M01: Introduction to Electrical Safety
    - M02: Hazard Assessment
    - M03: LOTO Procedures
    - M04: Electric Shock
    - M05: Arc Flash Events

🔐 Security Code Review

- Focuses on manual review techniques for secure coding
- Teaches prioritization, organization, and best practices
- Last accessed: 26 Aug 2025
- Views: 6 | View Time: 10 minutes

🏢 HVAC Basics (EcoStruxure Prescription)

- Covers mechanical and control foundations for building systems
- Modules include:
    - HVAC Systems I: Introduction
    - HVAC Systems II: All-Air Systems
    - HVAC Systems II Test: Failed (Retake required)

🌱 Sustainability School – Chapter 3

- Focus on decarbonization, energy efficiency, and profitability

- Covers tools for buildings, IT, industry, and residential sectors
- Last accessed: 7 Sep 2025
- Views: 15 | View Time: 1 minute

□ Transcript Summary

Course Code	Start Date	Delivery Method	Requested By	Status
GSCH&SCS0001009	14 Sep 2025	Self-Requested	Tshingombe Fiston	In Progress
GBLTECE006	24 Aug 2025	Self-Requested	Tshingombe Fiston	In Progress
BLDBMSC0001029	31 Aug 2025	Self-Requested	Tshingombe Fiston	In Progress
PDCSUSES1001000	31 Aug 2025	Self-Requested	Tshingombe Fiston	In Progress

□ Visual Basic Audit Sheet Generator (Sample)

```
Sub GenerateAuditSheet()
    Dim ws As Worksheet
    Set ws = ThisWorkbook.Sheets("AuditLog")

    ws.Cells(1, 1).Value = "Date"
    ws.Cells(1, 2).Value = "Course Title"
    ws.Cells(1, 3).Value = "Status"
    ws.Cells(1, 4).Value = "Provider"
    ws.Cells(1, 5).Value = "Training Hours"
    ws.Cells(1, 6).Value = "Progress"
    ws.Cells(1, 7).Value = "Level"

    ws.Cells(2, 1).Value = "2025-10-17"
    ws.Cells(2, 2).Value = "Advanced Electrical Safety (Multilingual)"
    ws.Cells(2, 3).Value = "In Progress"
    ws.Cells(2, 4).Value = "Global Supply Chain Academy"
    ws.Cells(2, 5).Value = "23h 50min"
    ws.Cells(2, 6).Value = "Partial"
    ws.Cells(2, 7).Value = "Advanced"
End Sub
```

This is a modular research framework for the course “Foundations of Modern Data Center Physical Infrastructure Management” offered by Schneider Electric University. It includes all requested

components: overview, scope, keywords, research statement, methodology, analysis, audit logic, and Visual Basic code.

🧩 Modular Research Framework – Foundations of Modern Data Center Physical Infrastructure Management

1️⃣ Overview

This course introduces the principles of Data Center Infrastructure Management (DCIM), emphasizing its role in ensuring *reliability, efficiency, sustainability,* and *security* in modern data centers. It addresses the growing complexity of infrastructure due to global data expansion and the need for resilient systems.

2️⃣ Scope

- **Domains**: DCIM, energy efficiency, infrastructure reliability, sustainability, cybersecurity
- **Stakeholders**: Schneider Electric, IT managers, infrastructure engineers, government regulators
- **Applications**: Data center design, monitoring, risk mitigation, trade test preparation

3️⃣ Keywords

DCIM, data center, infrastructure management, uptime, energy efficiency, sustainability, Schneider Electric, physical infrastructure, risk mitigation, trade test

4️⃣ Research Statement

To design a credential-linked framework that integrates DCIM training into public service, trade test readiness, and infrastructure resilience strategies for modern data centers.

5️⃣ Methodology

- **Data Sources**: LMS transcripts, infrastructure audit logs, DCIM software outputs
- **Tools**: Visual Basic for audit automation, logigrams for workflow mapping, algorigrams for decision logic

- **Validation**: SAQA/NQF alignment, NRF/AIU research mapping, certification simulation

6 Data Analysis

- **Techniques**: Performance benchmarking, incident tracking, energy usage profiling
- **Metrics**: Uptime %, cooling efficiency, power usage effectiveness (PUE), incident frequency

7 Advantages

- Modular and scalable
- Audit-ready and bilingual
- Trade test and SAQA/NQF alignment
- Cross-domain integration
- Supports sustainability goals

8 Disadvantages

- Requires high documentation precision
- Dependent on real-time infrastructure data
- Licensing and tool access may vary by region

9 Management System Information

- **Platform**: Cornerstone LMS + GitLab +
- **Modules**: Credential tracker, syllabus mapper, audit log generator, infrastructure validator

Delivery & Key Performance Policy

- **KPIs**: Completion rate, infrastructure uptime, energy savings, audit compliance
- **Policy Alignment**: SAQA/NQF, DHET, Schneider Electric standards

11 Investigation Principles

- Root cause analysis of system failures
- Licensing traceability
- Trade test readiness mapping
- Safety compliance and uptime assurance
- NRF/AIU research integration

1.2 Communication & Administration Skills

- Technical documentation
- Infrastructure reporting
- Certification coordination
- Public service communication
- Career mentoring and publication

1.3 Statistic Report: Safety & Incidents

- **Metrics**: Collision frequency, electrical fault rates, containment level compliance
- **Tools**: Visual Basic dashboards, Excel pivot tables, logigram flowcharts

1.4 Trade Test Requirements

- NATED/NN diploma alignment
- DHET-approved syllabi
- DCIM proficiency
- Safety and licensing documentation
- Certification readiness

1.5 Audit & Inventory

- GitLab repository logs
- Visual Basic audit sheets
- LMS training transcripts
- Inventory of modules, licenses, and infrastructure components

1.6 Conclusion

This framework supports legacy preservation, public service reform, and modular education delivery across data center infrastructure, safety, and trade test domains. It is credential-ready, bilingual, and aligned with SAQA/NQF, NRF, and AIU standards.

1.7 Bibliography

-

1️⃣8️⃣ Visual Basic Code Module: Audit Sheet GeneratorSub GenerateAuditSheet()
```
    Dim ws As Worksheet
    Set ws = ThisWorkbook.Sheets("AuditLog")

    ws.Cells(1, 1).Value = "Date"
    ws.Cells(1, 2).Value = "Course Title"
    ws.Cells(1, 3).Value = "Status"
    ws.Cells(1, 4).Value = "Provider"
    ws.Cells(1, 5).Value = "Training Hours"
    ws.Cells(1, 6).Value = "Progress"
    ws.Cells(1, 7).Value = "Level"

    ws.Cells(2, 1).Value = "2025-10-17"
    ws.Cells(2, 2).Value = "Foundations of Modern Data Center Physical
Infrastructure Management"
    ws.Cells(2, 3).Value = "In Progress"
    ws.Cells(2, 4).Value = "Schneider Electric University"
    ws.Cells(2, 5).Value = "0h 45min"
    ws.Cells(2, 6).Value = "0%"
    ws.Cells(2, 7).Value = "Basic"
End Sub
```

1️⃣9️⃣ Logigram: DCIM Credential Workflow

- [Start]
- ↓
- [Import LMS Transcript]
- ↓
- [Filter DCIM Modules]
- ↓
- [Check Completion & Licensing Requirements]
- ↓
- [Generate Audit Sheet]
- ↓
- [Publish to GitLab or Archive.org]
- ↓
- [End]

2️⃣0️⃣ Algorigram: Certification Eligibility Decision Tree

plaintext

```
[Start]
   ↓
[Has Completed Required Modules?]
   ↓
Yes ⟶ [Activated Infrastructure Audit Tools?]
          ↓
        Yes ⟶ [Completed Safety & Licensing Training?]
                  ↓
                Yes ⟶ [Eligible for Certification & Trade Test]
                  ↓
                No ⟶ [Complete Remaining Safety Modules]
```

- ```
  ↓
  ```
- ```
  No ⟶ [Activate Audit Tools]
  ```
- ```
  ↓
  ```
- ```
  No ⟶ [Complete Curriculum]
  ```
- ```
  ↓
  ```
- ```
  [End]
  ```
- Would you like this framework scaffolded into a bilingual dashboard or published to GitLab for credential tracking and trade test readiness? I can also help you integrate it with your Schneider Home and Panel Server modules.

Here is a fully translated and structured **English-language tableaux dashboard** for your active training in **Foundations of Modern Data Center Physical Infrastructure Management**, along with related modules in **Panel Server Architecture**, **Schneider Home Certification**, and **EcoStruxure Machine Certification**. This format supports credential tracking, audit readiness, and trade test alignment.

Technical Training Dashboard – Tshingombe Fiston

Course Title	Training Type	Provider	Version	Hours	Status	Progress	Level
Foundations of Modern Data Center Physical Infrastructure Management	Online Class	Schneider Electric University	2.0	0h 45min	In Progress	0%	Basic
EcoStruxure Panel Server: Architectures	Online Class	Digital Power Academy	4.0	0h 45min	Registered	0%	Intermediate
Schneider Home Certification	Curriculum	Home and Distribution Academy	31.0	3h 39min	In Progress	Partial	Intermediate
EcoStruxure Machine Certification	Curriculum	Digital Factory	23.0	13h 57min	In Progress	Partial	Advanced

Module Highlights

Data Center Infrastructure Management (DCIM)

- Explores the role of DCIM in ensuring reliability, efficiency, sustainability, and security of data centers

- Emphasizes infrastructure challenges due to global data growth
- Last accessed: 26 Aug 2025
- Views: 4 | View Time: 6 minutes

EcoStruxure Panel Server

- Covers gateway architecture and integration with energy devices and software
- Focuses on implementation scenarios for Schneider Electric's Panel Server
- Status: Registered, not yet started

Schneider Home Certification

- Covers installation and commissioning of Schneider Home energy management systems
- Includes inverter, boost, backup controller, energy monitor, and installer portal
- Ends with a 25-point certification test (80% required to pass)
- NABCEP CEU credits: 3

⚙ EcoStruxure Machine Certification

- Validates integration skills for Altivar-based automation projects
- Recognizes certified professionals in machine technology deployment
- Status: In Progress across multiple versions

Transcript Summary

Course Code	Start Date	Requested By	Status
ENGTECES0001000	26 Aug 2025	Tshingombe Fiston	In Progress
BLDECXES0001064	9 Jun 2025	Sagar Singh	Registered

Course Code	Start Date	Requested By	Status
HDAPRDCS0001005	9 Jun 2025	Sagar Singh	In Progress
Multiple Versions (14–31)	2024–2025	Tshingombe Fiston	In Progress
EcoStruxure Machine Certification	Ongoing	Multiple Assignments	In Progress

```
ub GenerateAuditSheet()
    Dim ws As Worksheet
    Set ws = ThisWorkbook.Sheets("AuditLog")

    ws.Cells(1, 1).Value = "Date"
    ws.Cells(1, 2).Value = "Course Title"
    ws.Cells(1, 3).Value = "Status"
    ws.Cells(1, 4).Value = "Provider"
    ws.Cells(1, 5).Value = "Training Hours"
    ws.Cells(1, 6).Value = "Progress"
    ws.Cells(1, 7).Value = "Level"

    ws.Cells(2, 1).Value = "2025-10-17"
    ws.Cells(2, 2).Value = "Foundations of Modern Data Center Physical
Infrastructure Management"
    ws.Cells(2, 3).Value = "In Progress"
    ws.Cells(2, 4).Value = "Schneider Electric University"
    ws.Cells(2, 5).Value = "0h 45min"
    ws.Cells(2, 6).Value = "0%"
    ws.Cells(2, 7).Value = "Basic"
End Sub
```

Here is a fully translated and structured **modular research framework in English** for your active curriculum in **Altivar Machine Professional Certification (Version 23.0)**. This framework supports audit tracking, trade test alignment, and public service integration.

□ Modular Research Framework – Altivar Machine Professional Certification

1□ Overview

This curriculum provides comprehensive training on Altivar drives and soft starters, covering motor control, cabling, electromagnetic compatibility, startup functions, and advanced diagnostics. It prepares learners for Schneider Electric’s Altivar Machine Professional certification, validating expertise in industrial automation and drive systems.

2 Scope

- **Domains**: Motor control, drive configuration, soft starter integration, EMC, PID, diagnostics
- **Stakeholders**: Schneider Electric, SAQA, DHET, NRF, AIU, industrial automation regulators
- **Applications**: Trade test readiness, certification, public service deployment, energy efficiency

3 Keywords

Altivar, ATV12, ATV320, ATV340, ATS01, ATS22, ATS480, EMC, PID, VSD, motor control, soft starter, drive functions, trade test, certification, audit, automation

4 Research Statement

To design a modular, credential-linked framework that integrates Altivar drive training into public service, trade test readiness, and industrial automation certification.

5 Methodology

- **Data Sources**: LMS transcripts, module metadata, drive configuration logs, trade test forms
- **Tools**: Visual Basic for audit automation, logigrams for workflow mapping, algorigrams for decision logic
- **Validation**: SAQA/NQF alignment, NRF/AIU research mapping, certification simulation

6 Data Analysis

- **Techniques**: Module completion tracking, performance benchmarking, diagnostic readiness scoring
- **Metrics**: Test scores, module activation rate, prerequisite completion, certification eligibility

7 Advantages

- Modular and scalable

- Audit-ready and bilingual
- Trade test and SAQA/NQF alignment
- Cross-domain integration
- Supports industrial automation goals

8️ Disadvantages

- High documentation overhead
- Requires prerequisite coordination
- Licensing and tool access may vary by region

9️ Management System Information

- **Platform**: Cornerstone LMS + GitLab +
- **Modules**: Credential tracker, syllabus mapper, audit log generator, certification validator

Delivery & Key Performance Policy

- **KPIs**: Completion rate, certification eligibility, trade test readiness, audit compliance
- **Policy Alignment**: SAQA/NQF, DHET, Schneider Electric standards

1️1️ Investigation Principles

- Root cause analysis of training gaps
- Licensing traceability
- Trade test readiness mapping
- Safety compliance and diagnostic accuracy
- NRF/AIU research integration

1️2️ Communication & Administration Skills

- Technical documentation
- Drive configuration reporting
- Certification coordination
- Public service communication
- Career mentoring and publication

1️⃣3️⃣ Statistic Report: Safety & Incidents

- **Metrics**: Collision frequency, electrical fault rates, containment level compliance
- **Tools**: Visual Basic dashboards, Excel pivot tables, logigram flowcharts

1️⃣4️⃣ Trade Test Requirements

- NATED/NN diploma alignment
- DHET-approved syllabi
- Altivar drive configuration proficiency
- Safety and licensing documentation
- Certification readiness

1️⃣5️⃣ Audit & Inventory

- GitLab repository logs
- Visual Basic audit sheets
- LMS training transcripts
- Inventory of modules, licenses, and drive components

1️⃣6️⃣ Conclusion

This framework supports legacy preservation, public service reform, and modular education delivery across industrial automation, safety, and trade test domains. It is credential-ready, bilingual, and aligned with SAQA/NQF, NRF, and AIU standards.

1️⃣7️⃣ Bibliography

```
•
•  Sub GenerateAuditSheet()
•      Dim ws As Worksheet
•      Set ws = ThisWorkbook.Sheets("AuditLog")
•
•      ws.Cells(1, 1).Value = "Date"
•      ws.Cells(1, 2).Value = "Course Title"
•      ws.Cells(1, 3).Value = "Status"
•      ws.Cells(1, 4).Value = "Provider"
•      ws.Cells(1, 5).Value = "Training Hours"
•      ws.Cells(1, 6).Value = "Progress"
•      ws.Cells(1, 7).Value = "Version"
•
•      ws.Cells(2, 1).Value = "2025-10-17"
•      ws.Cells(2, 2).Value = "Altivar Machine Professional Certification"
•      ws.Cells(2, 3).Value = "In Progress"
•      ws.Cells(2, 4).Value = "Digital Factory"
```

```
    ws.Cells(2, 5).Value = "30+ hours"
    ws.Cells(2, 6).Value = "Partial"
    ws.Cells(2, 7).Value = "Version 23.0"
End Sub
```

1□9□ Logigram: Altivar Certification Workflow

plaintext

```
[Start]
   ↓
[Import LMS Transcript]
   ↓
[Filter Altivar Modules]
   ↓
[Check Completion & Prerequisites]
   ↓
[Generate Audit Sheet]
   ↓
[Publish to GitLab or Archive.org]
   ↓
[End]
```

2□0□ Algorigram: Certification Eligibility Decision Tree

plaintext

```
[Start]
   ↓
[Has Completed Required Modules?]
   ↓
Yes ⟶ [Activated Prerequisite Content?]
          ↓
        Yes ⟶ [Completed Mandatory Tests?]
                    ↓
                  Yes ⟶ [Eligible for Altivar Certification & Trade
Test]
                    ↓
                  No ⟶ [Complete Remaining Tests]
          ↓
        No ⟶ [Activate Prerequisite Modules]
   ↓
No ⟶ [Complete Curriculum]
   ↓
[End]
```

ivar Drives & Soft Starters Curriculum Dashboard – Tshingombe Fiston

Course Title	Type	Status	Level	Prerequisite
Drives Basics: Motors	Online Class	In Progress	Basic	None
Drives Basics: Motor Cable Length	Online Class	In Progress	Basic	None
Drives Basics: Harmonics	Online	Register	Basic	None

Course Title	Type	Status	Level	Prerequisite
	Class	ed		
Drives Basics: EMC	Online Class	In Progress	Basic	None
Drives Basics: Applications	Online Class	Register ed	Basic	None
Altivar Machine: ATV12/320/340 Discover	Video	Register ed	Introducto ry	None
Altivar Drives: VSDs	Online Class	Register ed	Basic	None
Altivar Soft Starter: ATS01/22/480 Discover	Video	Register ed	Introducto ry	None
Altivar Drives & Soft Starters: Network Options	Video	Register ed	Intermedi ate	None
Altivar ATV12 Mounting & Cabling (Parts 1–3)	Video	Register ed	Intermedi ate	None
Altivar ATV320 Mounting & Cabling (Parts 1–3)	Video	Register ed	Intermedi ate	None
Altivar ATV340 Mounting & Cabling (Parts 1–4)	Video	Partial	Intermedi ate	Prerequisite Required
Soft Starter ATS01/130/22/480 Mounting	Video	Register ed	Intermedi ate	None
Altivar Drives: Standard Functions (Parts 1–2)	Video	Register ed	Intermedi ate	None
Altivar Drives: Advanced Functions (Parts 1–2)	Video	Register ed	Advanced	None
Altivar Drives: Functions (Test)	Test	Register ed	Mandatory	None
Altivar Drives: Speed Reference & Ramps (Parts 1–3)	Video	Partial	Intermedi ate	Prerequisite Required
Altivar Drives: Inputs/Outputs (Parts 1–2)	Video	Partial	Intermedi ate	Prerequisite Required
Altivar Drives: Advanced Parameter Handling (Parts 1–2)	Video	Partial	Advanced	Prerequisite Required

Course Title	Type	Status	Level	Prerequisite
Altivar Drives: Error & Warning Handling (Parts 1–3)	Video	Partial	Advanced	Prerequisite Required
Altivar Drives: Ramp Auto-Adaptation & Braking	Video	Registered	Advanced	None
Altivar Drives: PID Control (Parts 1–2)	Video	Partial	Advanced	Prerequisite Required
Altivar Drives: Motor Control Types	Video	Registered	Advanced	None
Altivar Drives: Asynchronous Motor	Video	Registered	Advanced	None
Altivar Drives: Startup Functions (Test)	Test	Registered	Mandatory	None
Altivar Soft Starters: Functions Overview (Parts 1–4)	Video	Partial	Intermediate	Prerequisite Required
Altivar Soft Starters: Functions Overview (Test)	Test	Registered	Mandatory	None
Altivar Machine Professional Certification Test	Test	Registered	Final	Mandatory

□ Summary

- **Provider**: Digital Factory
- **Version**: 23.0
- **Total Training Hours**: ~30+ hours across modules
- **Status**: In Progress
- **Certification Goal**: Altivar Machine Professional
- **Assigned By**: Yin Zhou
- **Start Date**: 21 May 2025

Would you like this dashboard scaffolded into a bilingual credential portfolio or mapped to SAQA/NQF trade test requirements? I can also help you

generate a Visual Basic audit sheet or logigram to track your Altivar certification progress.

Itivar Machine Professional Curriculum Dashboard – Tshingombe Fiston

Module Title	Type	Status	Prerequisite	Notes
Drives Basics: Motors	Online Class	In Progress	None	Core motor principles
Drives Basics: Motor Cable Length	Online Class	In Progress	None	Installation standards
Drives Basics: Harmonics	Online Class	Registered	None	Power quality fundamentals
Drives Basics: EMC	Online Class	In Progress	None	Electromagnetic compatibility
Drives Basics: Applications	Online Class	Registered	None	Use-case scenarios
Altivar Machine: ATV12/320/340 Discover	Video	Registered	None	Product overview
Introduction to Altivar Machine ATV320	Online Class	Registered	None	Entry-level configuration
Altivar Machine ATV340: Introduction	Online Class	Registered	None	Advanced drive features
Drives Basics: Variable Speed Drives (VSDs)	Online Class	Registered	None	Speed control fundamentals
Altivar Soft Starter: ATS01/22/480 Discover	Video	Registered	None	Starter types and use
Drives Basics: Altivar Soft Starters	Video	Registered	None	Soft start principles
Altivar Drives & Soft Starters: Network Options	Video	Registered	None	Communication protocols
ATV12 Mounting & Cabling (Parts 1–3)	Video	Registered	None	Installation steps
ATV320 Mounting & Cabling (Parts 1–3)	Video	Registered	None	Wiring and layout
ATV340 Mounting & Cabling (Parts 1–4)	Video	Partial	Prerequisite Required	Advanced installation

Module Title	Type	Status	Prerequisite	Notes
ATS01/130/22/480 Mounting & Cabling	Video	Registered	None	Soft starter setup
Altivar Drives: Standard Functions (Parts 1–2)	Video	Registered	None	Basic drive functions
Altivar Drives: Advanced Functions (Parts 1–2)	Video	Registered	None	Extended capabilities
Altivar Drives: Functions (Test)	Test	Registered	Mandatory	Functionality validation
Speed Reference & Ramps (Parts 1–3)	Video	Partial	Prerequisite Required	Acceleration control
Inputs/Outputs (Parts 1–2)	Video	Partial	Prerequisite Required	Signal mapping
Advanced Parameter Handling (Parts 1–2)	Video	Partial	Prerequisite Required	Custom configuration
Error & Warning Handling (Parts 1–3)	Video	Partial	Prerequisite Required	Troubleshooting
Ramp Auto-Adaptation & Braking Resistor	Video	Registered	None	Load management
PID Control (Parts 1–2)	Video	Partial	Prerequisite Required	Feedback control
Motor Control Types	Video	Registered	None	Drive modes
Asynchronous Motor	Video	Registered	None	Motor theory
Drive Functions for Startup (Test)	Test	Registered	Mandatory	Startup readiness
Soft Starter Functions Overview (Parts 1–4)	Video	Partial	Prerequisite Required	Functional breakdown
Soft Starter Functions Overview (Test)	Test	Registered	Mandatory	Knowledge check
Altivar Machine Professional (Final Test)	Test	Registered	Mandatory	Certification exam

Assignment Summary

Version	Assigned By	Start Date	Status
23.0	Yin Zhou	21 May 2025	In Progress
22.0	Tshingombe Fiston	14 Jan 2024	In Progress

□ Summary

- **Provider**: Digital Factory
- **Curriculum Version**: 23.0
- **Total Training Hours**: ~30+ hours
- **Certification Goal**: Altivar Machine Professional
- **Final Requirement**: Pass mandatory certification test

Would you like this dashboard scaffolded into a bilingual credent

Here is a fully translated and structured **modular research framework in English** for your active curriculum in **Advanced EBO 2023: Engineering EasyLogic**, aligned with certification, trade test readiness, and public service integration.

□ Modular Research Framework – Advanced EBO 2023: Engineering EasyLogic

1□ Overview

This curriculum equips engineering and service personnel with the skills to configure, commission, and integrate EasyLogic controllers within EcoStruxure Building Operation 2023. It covers architecture design, BACnet MS/TP implementation, and controller onboarding for MP-x, RP-C, RP-IO, SP90, and EasyLogic Living sensors.

2□ Scope

- **Domains**: Building automation, BACnet engineering, controller commissioning, retrofit integration

- **Stakeholders**: Schneider Electric, SAQA, DHET, NRF, AIU, government infrastructure bodies
- **Applications**: Trade test preparation, certification, public building retrofits, energy management

3 Keywords

EcoStruxure, EasyLogic, BACnet MS/TP, MP-x, RP-C, RP-IO, SP90, Living sensors, Fieldbus, controller architecture, retrofit, commissioning, trade test, certification

4 Research Statement

To design a modular, credential-linked framework that integrates EasyLogic controller engineering into public service, trade test readiness, and building automation certification.

5 Methodology

- **Data Sources**: LMS transcripts, controller specs, BACnet logs, trade test forms
- **Tools**: Visual Basic for audit automation, logigrams for workflow mapping, algorigrams for decision logic
- **Validation**: SAQA/NQF alignment, NRF/AIU research mapping, certification simulation

6 Data Analysis

- **Techniques**: Module completion tracking, BACnet packet analysis, controller onboarding success rate
- **Metrics**: Test scores, device activation rate, architecture compliance, certification eligibility

7 Advantages

- Modular and scalable
- Audit-ready and bilingual
- Trade test and SAQA/NQF alignment

- Cross-domain integration
- Supports retrofit and new build projects

8 Disadvantages

- High documentation overhead
- Requires prerequisite coordination
- Licensing and tool access may vary by region

9 Management System Information

- **Platform**: Cornerstone LMS + GitLab +
- **Modules**: Credential tracker, syllabus mapper, audit log generator, BACnet validator

Delivery & Key Performance Policy

- **KPIs**: Completion rate, BACnet commissioning success, certification eligibility, audit compliance
- **Policy Alignment**: SAQA/NQF, DHET, Schneider Electric standards

11 Investigation Principles

- Root cause analysis of onboarding failures
- Licensing traceability
- Trade test readiness mapping
- Safety compliance and BACnet accuracy
- NRF/AIU research integration

12 Communication & Administration Skills

- Technical documentation
- BACnet configuration reporting
- Certification coordination
- Public service communication
- Career mentoring and publication

13 Statistic Report: Safety & Incidents

- **Metrics**: Collision frequency, controller fault rates, containment level compliance

- **Tools**: Visual Basic dashboards, Excel pivot tables, logigram flowcharts

1.4 Trade Test Requirements

- NATED/NN diploma alignment
- DHET-approved syllabi
- EasyLogic controller commissioning proficiency
- Safety and licensing documentation
- Certification readiness

1.5 Audit & Inventory

- GitLab repository logs
- Visual Basic audit sheets
- LMS training transcripts
- Inventory of modules, licenses, and controller components

1.6 Conclusion

This framework supports legacy preservation, public service reform, and modular education delivery across building automation, safety, and trade test domains. It is credential-ready, bilingual, and aligned with SAQA/NQF, NRF, and AIU standards.

1.7 Bibliography

```
ub GenerateAuditSheet()
    Dim ws As Worksheet
    Set ws = ThisWorkbook.Sheets("AuditLog")

    ws.Cells(1, 1).Value = "Date"
    ws.Cells(1, 2).Value = "Course Title"
    ws.Cells(1, 3).Value = "Status"
    ws.Cells(1, 4).Value = "Provider"
    ws.Cells(1, 5).Value = "Training Hours"
    ws.Cells(1, 6).Value = "Progress"
    ws.Cells(1, 7).Value = "Certification Ready"

    ws.Cells(2, 1).Value = "2025-10-17"
    ws.Cells(2, 2).Value = "EBO 2023: Engineering EasyLogic"
    ws.Cells(2, 3).Value = "In Progress"
    ws.Cells(2, 4).Value = "Digital Building Academy"
    ws.Cells(2, 5).Value = "18h 56min"
    ws.Cells(2, 6).Value = "Partial"
    ws.Cells(2, 7).Value = "Pending"
End Sub
```

- ## 1️⃣9️⃣ Logigram: EasyLogic Engineering Workflow
- plaintext
- ```
  [Start]
     ↓
  [Import LMS Transcript]
     ↓
  [Filter EBO 2023 EasyLogic Modules]
     ↓
  [Check Completion & Prerequisites]
     ↓
  [Generate Audit Sheet]
     ↓
  [Publish to GitLab or Archive.org]
     ↓
  [End]
  ```
- ## 2️⃣0️⃣ Algorigram: Certification Eligibility Decision Tree
- ```
  [Start]
     ↓
  [Has Completed EIA 485 & BACnet MS/TP Modules?]
     ↓
  Yes ⟶ [Activated EasyLogic Device Training?]
              ↓
          Yes ⟶ [Completed Instructor-led Training & Certification
  Test?]
                       ↓
                   Yes ⟶ [Eligible for EBO 2023 EasyLogic
  Certification]
                       ↓
                   No ⟶ [Complete Final Modules]
              ↓
          No ⟶ [Activate Device Training]
     ↓
  No ⟶ [Complete Core Modules]
     ↓
  [End]
  ```
- Would you like this framework scaffolded into a bilingual dashboard or published to GitLab for credential tracking and trade test readiness? I can also help you integrate it with your BACnet, RP-C, and SP90 controller modules.

- Thank you for sharing this detailed update, Tshingombe. Here's a structured summary and action-oriented tableaux to help you consolidate your progress, feedback, and next steps across your professional development, job applications, and training engagements:
- 🎓 Career & Training Dashboard – Tshingombe Fiston

- ## 🏆 Training Achievements

Course Title	Provider	Status	Action Required
Deliver Switchboard Project Digitally: Episode 1	Schneider Electric	Completed	Submit evaluation survey
EBO 2023: Engineering EasyLogic	Digital Building Academy	In Progress	Complete BACnet MS/TP test, retake EIA 485 test
Engineering Order Booking & Talent Discovery	Schneider Electric	Case Opened	Review case #119082247

- **Job Applications**

Position	Company	Status	Next Step
Project Engineer – 46902	Eaton	Closed	Apply to other roles via

Registration & Profile Details

System	Role	Status
Schneider Electric Assessor Portal	Engineering Electrical Assessment	Active
Profile ID	tircg000910610	Verified
Citizenship	Zaire	Other
Disability Status	None (Previously Disabled US)	Updated

Recommendations & Next Actions

- **Training Follow-up**: Apply learnings from Deliver Switchboard Project Digitally within 24 hours to retain knowledge. Use Yammer or #whatdidyoulearntoday to share insights.
- **Certification Progress**: Retake EIA 485 test and complete BACnet MS/TP test to unlock EasyLogic certification.
- **Job Strategy**: Reapply to Eaton roles aligned with your energy and automation expertise. Consider tailoring your CV to highlight EBO, BACnet, and EasyLogic credentials.
- **Case Management**: Review and close Schneider case #119082247 if resolved. Use support@schneider for technical queries.
- `Sub GenerateCareerAudit()`
- `    Dim ws As Worksheet`

```
    Set ws = ThisWorkbook.Sheets("CareerAudit")

    ws.Cells(1, 1).Value = "Date"
    ws.Cells(1, 2).Value = "Activity"
    ws.Cells(1, 3).Value = "Status"
    ws.Cells(1, 4).Value = "Next Step"

    ws.Cells(2, 1).Value = "2025-10-17"
    ws.Cells(2, 2).Value = "Deliver Switchboard Project Digitally"
    ws.Cells(2, 3).Value = "Completed"
    ws.Cells(2, 4).Value = "Submit Evaluation"

    ws.Cells(3, 1).Value = "2025-10-17"
    ws.Cells(3, 2).Value = "EBO 2023: Engineering EasyLogic"
    ws.Cells(3, 3).Value = "In Progress"
    ws.Cells(3, 4).Value = "Retake EIA 485 Test"
End Sub
```

Professional Profile Dashboard – Tshingombe Tshitadi Fiston

Personal & Registration Details

Field	Value
Full Name	Tshingombe Tshitadi Fiston
Date of Birth	11 October 1982
Nationality	Zaire
Citizenship Status	Other
Race	African
Gender	Male
Home Language	Afrikaans
Disability Status	None (Previously Disabled US)
Socioeconomic Status	N/A: Institution
Municipality	Albert Luthuli
STATSSA Area	968095003 – Njhakanjhaka SP
Province	Mpumalanga
Contact Email	tshingombefiston@gmail.com

Field	Value
Cell Number	0725298946
Assessor ID	tircg000910610
User ID	127952
User Type	Assessor
Platform	Schneider Electric Assessor Portal
IEC Webstore Email	tshingombekb@gmail.com
IEC Sector	Electrical
IEC Job Title	Engineer
IEC VAT Number	072598946

Education & Accreditation

Field	Value
Last School	Christ Church School (EMIS: 700400091)
Last School Year	2002
Qualification Accreditations	Active
Unit Standard Accreditations	Active
Professional Experience	Registered
Educational Information	Verified

Address Book

Type	Address
Physical Address	20 Percy Street, Witbank, 1030

Type	Address
Postal Address	Mandela Square, Witbank, 1030

IEC Engagement Summary

Platform	Status
IEC Webstore Registration	Complete
IEC Newsletter	Not Subscribed
IEC Publications	Accessible
IEC Account	Active
IEC Customer Service	Multilingual Support Available
IEC Standards Access	IEC 62368-1:2023 RLV, IT Systems, Telecom

Actionable Next Steps

- **IEC Newsletter**: Subscribe to stay updated on monthly publications.
- **Billing/Shipping Setup**: Add default addresses for IEC orders.
- **Training Evaluation**: Complete pending course feedback for Schneider Electric.
- **Audit Prep**: Export this dashboard to GitLab or

```
Sub GenerateProfileAudit()
    Dim ws As Worksheet
    Set ws = ThisWorkbook.Sheets("ProfileAudit")

    ws.Cells(1, 1).Value = "Field"
    ws.Cells(1, 2).Value = "Value"

    ws.Cells(2, 1).Value = "Full Name"
    ws.Cells(2, 2).Value = "Tshingombe Tshitadi Fiston"

    ws.Cells(3, 1).Value = "Assessor ID"
    ws.Cells(3, 2).Value = "tircg000910610"

    ws.Cells(4, 1).Value = "IEC Sector"
    ws.Cells(4, 2).Value = "Electrical"
```

```
    ws.Cells(5, 1).Value = "IEC VAT Number"
    ws.Cells(5, 2).Value = "072598946"
End Sub
```

```
[Start]
   ↓
[Import Assessor Portal Profile]
   ↓
[Verify Accreditation & Experience]
   ↓
[Sync IEC Registration & Sector Info]
   ↓
[Generate Audit Sheet]
   ↓
[Publish to GitLab or Archive.org]
   ↓
[End]
```

□ Algorigram: Certification Readiness Decision Tree

plaintext

```
[Start]
   ↓
[Has Active Assessor Accreditation?]
   ↓
Yes ⟶ [IEC Sector & Job Title Verified?]
          ↓
        Yes ⟶ [Training & Evaluation Completed?]
                    ↓
                  Yes ⟶ [Eligible for Certification & Trade Test]
                    ↓
                  No ⟶ [Complete Training Feedback]
          ↓
        No ⟶ [Update IEC Profile]
   ↓
No ⟶ [Activate Accreditation]
   ↓
[End]
```

(RLV), tailored for your engineering and certification portfolio:

□ IEC 62368-1:2023 RLV – Technical Safety Framework

1□ Overview

IEC 62368-1:2023 RLV is the latest international safety standard for audio/video, information, and communication technology equipment. It introduces a hazard-based approach to product safety, focusing on energy source classification and safeguard implementation to prevent injury, pain, and property damage.

2□ Scope

- **Domains**: Product safety, energy classification, hazard mitigation, BACnet/IP integration
- **Stakeholders**: Designers, engineers, regulators, manufacturers, certification bodies
- **Applications**: Equipment design, compliance testing, retrofit safety upgrades, trade test preparation

3 Keywords

IEC 62368-1, Redline Version, energy source classification, safeguards, BACnet/IP, hazard-based safety, TC 108, audio/video equipment, ICT, fire protection, injury prevention

4 Research Statement

To analyze and apply the hazard-based safety principles of IEC 62368-1:2023 RLV in the design and certification of modern ICT and AV systems, ensuring compliance and public safety.

5 Methodology

- **Data Sources**: IEC 62368-1:2023 RLV, previous editions, TC 108 publications
- **Tools**: Redline comparison, risk matrix modeling, safeguard mapping
- **Validation**: IEC compliance audit, certification simulation, BACnet/IP integration testing

6 Data Analysis

- **Techniques**: Comparative analysis of Redline vs. previous edition
- **Metrics**: Number of safeguard revisions, energy source classifications, compliance gaps

7 Advantages

- Clear hazard-based structure
- Redline version enables fast change tracking
- Supports modular safety design

- Aligns with BACnet/IP and EBO controller environments

8️ Disadvantages

- High technical complexity
- Requires multi-disciplinary interpretation
- Redline version available only in English
- Cost barrier for multi-user licensing (CHF 900)

9️ Management System Information

- **Publisher**: IEC (International Electrotechnical Commission)
- **Technical Committee**: TC 108
- **Edition**: 4.0
- **Publication Date**: 26 May 2023
- **Stability Date**: 2026
- **Pages**: 1224
- **File Size**: 18.54 MB
- **ISBN**: 9782832270868
- **ICS Codes**: 33.160.01 (AV systems), 35.020 (ICT systems)

Delivery & Key Performance Policy

- **KPIs**: Compliance rate, safeguard implementation accuracy, audit readiness
- **Policy Alignment**: IEC TC 108, BACnet/IP safety integration, EBO 2023/2024 curriculum

1️1️ Investigation Principles

- Root cause analysis of non-compliance
- Safeguard failure mapping

- BACnet/IP safety traceability
- Retrofit risk assessment

1️⃣2️⃣ Communication & Administration Skills

- Technical documentation
- Safety compliance reporting
- IEC standard referencing
- Certification coordination

1️⃣3️⃣ Statistic Report: Safety Incidents

- **Metrics**: Fire risk reduction, injury prevention rate, safeguard activation success
- **Tools**: IEC audit logs, BACnet/IP diagnostic reports, controller fault tracking

1️⃣4️⃣ Trade Test Requirements

- Familiarity with IEC 62368-1 hazard-based model
- BACnet/IP controller safety configuration
- EBO 2023/2024 curriculum alignment
- Certification readiness for electrical safety standards

1️⃣5️⃣ Audit & Inventory

- IEC publication logs
- Redline version comparison sheets
- BACnet/IP controller safety maps
- GitLab repository for credential tracking

1️⃣6️⃣ Conclusion

IEC 62368-1:2023 RLV provides a robust framework for designing safe ICT and AV equipment. Its hazard-based approach aligns with modern engineering practices and supports certification, trade test preparation, and public safety compliance.

1□7□ Bibliography

- 1□8□ Visual Basic Code Module: IEC Audit Sheet Generator
- Sub GenerateIECAudit()
- Dim ws As Worksheet
- Set ws = ThisWorkbook.Sheets("IECAudit")
-
- ws.Cells(1, 1).Value = "Date"
- ws.Cells(1, 2).Value = "Standard"
- ws.Cells(1, 3).Value = "Edition"
- ws.Cells(1, 4).Value = "Pages"
- ws.Cells(1, 5).Value = "Compliance Status"
-
- ws.Cells(2, 1).Value = "2025-10-17"
- ws.Cells(2, 2).Value = "IEC 62368-1:2023 RLV"
- ws.Cells(2, 3).Value = "Edition 4.0"
- ws.Cells(2, 4).Value = "1224"
- ws.Cells(2, 5).Value = "Pending Review"
- End Sub
- [Start]
- ↓
- [Import IEC 62368-1 Redline Version]
- ↓
- [Compare with Previous Edition]
- ↓
- [Map Safeguards to BACnet/IP Controllers]
- ↓
- [Generate Audit Sheet]
- ↓
- [Publish to GitLab or Archive.org]
- ↓
- [End]

- ## 2□0□ Algorigram: Certification Eligibility Decision Tree
- plaintext
- [Start]
- ↓
- [Has Accessed IEC 62368-1 Redline Version?]
- ↓
- Yes ⟶ [Mapped Safeguards to EBO Controllers?]
- ↓
- Yes ⟶ [Completed BACnet/IP Safety Modules?]
- ↓
- Yes ⟶ [Eligible for Safety Certification & Trade Test]
- ↓
- No ⟶ [Complete BACnet/IP Modules]
- ↓

- No ⟶ [Map Safeguards]
- ↓
- No ⟶ [Access IEC Redline Version]
- ↓
- [End]
- Would you like help integrating this framework with your EBO 2023/2024 curriculum or publishing it to GitLab for credential tracking and audit readiness? I can also assist with mapping IEC safeguards to BACnet/IP controller logic.

Here is a fully translated and structured **English-language tableaux dashboard** for the international safety standard **IEC 62368-1:2023 Redline Version (RLV)**. This format supports technical audit, certification alignment, and engineering reference for product safety design.

IEC 62368-1:2023 RLV – Safety Standard Dashboard

Attribute	Details
Standard Title	IEC 62368-1:2023 RLV
Scope	Safety requirements for audio/video, information and communication technology equipment
Edition	4.0
Publication Date	26 May 2023
Stability Date	2026
Language	English
Format	Electronic (PDF)
Pages	1224
File Size	18.54 MB
ISBN	9782832270868
Price	CHF 900 (multi-user license available)
Technical Committee	TC 108 – Safety of electronic equipment in AV, IT, and communication
ICS Codes	33.160.01 (AV systems), 35.020 (IT systems)
Category	Electromagnetic Compatibility – Safety
Publication Type	International Standard

Attribute	Details
Publisher	International Electrotechnical Commission (IEC)

□ Key Features of IEC 62368-1:2023 RLV

- □ Contains both the official standard and Redline version for change comparison
- □ Classifies energy sources and prescribes safeguards
- □ Provides guidance for implementing safety measures
- □ Aims to reduce pain, injury, and property damage
- □ Supports hazard-based engineering design principles
- □ Not a substitute for detailed compliance requirements

□ Related Publications

Title	Edition
IEC TR 62368-2:2025 RLV	Redline Version
IEC TR 62368-2:2025	Technical Report
IEC 62368-3:2017	Supplementary Safety Requirements

□ Engineering Application

Use Case	Application
Product Design	Safe AV/ICT equipment architecture
Retrofit Projects	Upgrade legacy systems to meet new safety standards
BACnet/IP Integration	Align controller safeguards with energy classification
Certification Prep	Reference for trade test and SAQA/NQF alignment

Use Case	Application
Audit Compliance	Compare Redline changes for regulatory traceability

□ Visual Basic Code Module: IEC Standard Audit Sheet

vb

```
Sub GenerateIECStandardAudit()
    Dim ws As Worksheet
    Set ws = ThisWorkbook.Sheets("IEC_Audit")

    ws.Cells(1, 1).Value = "Standard Title"
    ws.Cells(1, 2).Value = "IEC 62368-1:2023 RLV"

    ws.Cells(2, 1).Value = "Edition"
    ws.Cells(2, 2).Value = "4.0"

    ws.Cells(3, 1).Value = "Publication Date"
    ws.Cells(3, 2).Value = "2023-05-26"

    ws.Cells(4, 1).Value = "Pages"
    ws.Cells(4, 2).Value = "1224"

    ws.Cells(5, 1).Value = "Technical Committee"
    ws.Cells(5, 2).Value = "TC 108"

    ws.Cells(6, 1).Value = "Price"
    ws.Cells(6, 2).Value = "CHF 900"
End Sub
```

□ Logigram: IEC Safety Integration Workflow

```
[Start]
   ↓
[Access IEC 62368-1 Redline Version]
   ↓
[Compare with Previous Edition]
   ↓
[Classify Energy Sources]
   ↓
[Map Safeguards to Product Architecture]
   ↓
[Generate Audit Sheet]
   ↓
[End]
```

□ Algorigram: Certification Eligibility Decision Tree

```
[Start]
   ↓
[Has Accessed IEC 62368-1:2023 RLV?]
   ↓
```

- Yes ⟶ [Mapped Safeguards to Engineering Design?]
- ↓
- Yes ⟶ [Aligned with BACnet/IP or EBO Controllers?]
- ↓
- Yes ⟶ [Eligible for Safety Certification & Trade Test]
- ↓
- No ⟶ [Complete Controller Mapping]
- ↓
- No ⟶ [Apply Safeguard Principles]
- ↓
- No ⟶ [Access Redline Version]
- ↓
- [End]
- Would you like help integrating this dashboard into your credential portfolio or publishing it to GitLab for audit and legacy tracking? I can also assist with mapping IEC safeguards to your EBO 2023/2024 controller logic and BACnet/IP configurations.

key CISPR standards related to radio disturbance and immunity measurement, tailored for your engineering, compliance, and certification portfolio.

□ CISPR Standards Dashboard – Radio Disturbance & EMC Compliance

Standard Title	Edition	Scope	Price (CHF)	Committee
CISPR 15: Limits and Methods for Lighting Equipment	9.1	Radio disturbance limits for electrical lighting	1,030	CISPR/CIS/F
CISPR 16-1-2 CSV	2.1	Coupling devices for conducted disturbance	725	CISPR/CIS/A
CISPR 16-1-3 CSV	2.2	Ancillary equipment – Disturbance power	465	CISPR/CIS/A
CISPR 16-1-5 CSV	2.1	Antenna calibration sites (5 MHz–18 GHz)	675	CISPR/CIS/A
CISPR 16-1-6 CSV	1.2	EMC antenna calibration	1,110	CISPR/CIS/A
CISPR 16-2-1 CSV	3.1	Conducted disturbance measurements	790	CISPR/CIS/A
CISPR 16-2-3 CSV	4.2	Radiated disturbance measurements	1,110	CISPR/CIS/A
CISPR 16-4-2 CSV	2.2	Instrumentation uncertainty	790	CISPR/CIS/A

Standard Title	Edition	Scope	Price (CHF)	Committee
CISPR TR 16-4-3 CSV	2.1	Statistical EMC compliance for mass products	465	CISPR/CIS/A
CISPR TR 16-4-4 CSV	2.2	Complaint statistics & radio protection limits	1,450	CISPR/CIS/H
CISPR TR 16-4-5 CSV	1.2	Alternative test method conditions	885	CISPR/CIS/A
CISPR 32 CSV	2.1	EMC emission requirements for multimedia	1,190	CISPR/CIS/I

□ Key Features

- □ All standards are consolidated versions (CSV) with amendments integrated
- □ Cover full spectrum of EMC testing: conducted, radiated, statistical modeling, antenna calibration
- □ Support compliance for lighting, multimedia, and ICT equipment
- □ Enable trade test preparation and regulatory audit readiness
- □ Published by IEC and managed under CISPR technical committees

□ Engineering Application

Use Case	Application
Product Design	EMC compliance for lighting and multimedia systems
Retrofit Projects	Upgrade legacy systems to meet CISPR limits
Certification Prep	Reference for SAQA/NQF-aligned trade tests
Audit Compliance	Use CSV versions for traceable amendment tracking
Statistical Modeling	Apply TR 16-4-3 and TR 16-4-4 for mass product validation

🧾 Visual Basic Code Module: CISPR Audit Sheet Generator

```
Sub GenerateCISPRAudit()
    Dim ws As Worksheet
    Set ws = ThisWorkbook.Sheets("CISPRAudit")

    ws.Cells(1, 1).Value = "Standard"
    ws.Cells(1, 2).Value = "Edition"
    ws.Cells(1, 3).Value = "Price (CHF)"
    ws.Cells(1, 4).Value = "Committee"

    ws.Cells(2, 1).Value = "CISPR 15"
    ws.Cells(2, 2).Value = "9.1"
    ws.Cells(2, 3).Value = "1030"
    ws.Cells(2, 4).Value = "CISPR/CIS/F"

    ws.Cells(3, 1).Value = "CISPR 16-2-3 CSV"
    ws.Cells(3, 2).Value = "4.2"
    ws.Cells(3, 3).Value = "1110"
    ws.Cells(3, 4).Value = "CISPR/CIS/A"
End Sub
```

🧠 Logigram: EMC Compliance Workflow

```
[Start]
   ↓
[Select Relevant CISPR Standards]
   ↓
[Download CSV Versions with Amendments]
   ↓
[Apply Measurement Methods to Product Design]
   ↓
[Generate Audit Sheet]
   ↓
[Submit for Certification or Trade Test]
   ↓
[End]
```

🧠 Algorigram: EMC Certification Eligibility Decision Tree

```
[Start]
   ↓
[Has Accessed CISPR CSV Standards?]
   ↓
Yes ⟶ [Applied Measurement Methods to Product?]
          ↓
        Yes ⟶ [Completed Statistical Modeling & Complaint Analysis?]
                    ↓
                  Yes ⟶ [Eligible for EMC Certification & Trade Test]
                    ↓
                  No ⟶ [Complete TR 16-4-3 & TR 16-4-4 Modules]
          ↓
        No ⟶ [Apply Measurement Methods]
   ↓
No ⟶ [Access CISPR Standards]
```

- ↓
- [End]
- Would you like this dashboard scaffolded into a bilingual credential portfolio or published to GitLab for audit and legacy tracking? I can also help you align these CISPR standards with your EBO 2023/2024 and BACnet/IP controller modules.

Thank you for sharing your DOJ Online case records and profile details. Here's a structured and translated **English-language tableaux dashboard** summarizing your civil, protection order, clearance, and deceased estate cases. This format supports legal tracking, audit readiness, and strategic follow-up.

□ DOJ Case Management Dashboard – Tshingombe Tshitadi

□ Civil Cases Created

Case Name	Type	Created At	Status	URN
Tshingombe Tshitadi	Civil Law	Nov 19, 2024 – 5:55PM	Incomplete	—
Tshingombe Tshitadi	Civil Law	Aug 9, 2024 – 2:20PM	Pending Document Review	—
Tshingombe Tshitadi	Civil Law	Aug 5, 2024 – 9:17PM	Screen Application	1042024CIV004539
Tshingombe Tshitadi	Civil Law	Aug 5, 2024 – 4:23PM	Screen Application	1042024CIV004511
Tshingombe Tshitadi	Civil Law	Aug 5, 2024 – 4:41AM	Screen Application	112024CIV000013
Tshingombe Tshitadi	Civil Law	Aug 5, 2024 – 4:36AM	Screen Application	112024CIV000012
Tshingombe Tshitadi	Civil Law	Aug 5, 2024 – 4:32AM	Screen Application	112024CIV000011
Tshingombe Tshitadi	Civil Law	Aug 5, 2024 – 4:26AM	Screen Application	112024CIV000014
Tshingombe Tshitadi	Civil Law	Aug 4, 2024 – 8:27PM	Screen Application	112024CIV000015
Tshingombe Tshitadi	Civil Law	Aug 4, 2024 – 8:21PM	Screen Application	112024CIV000009
Tshingombe	Civil	Aug 4, 2024 –	Incomplete	112024CIV0000

Case Name	Type	Created At	Status	URN
Tshitadi	Law	8:03PM		08
Tshingombe Tshitadi	Civil Law	Aug 4, 2024 – 7:51PM	Screen Application	112024CIV000006
Tshingombe Tshitadi	Civil Law	Aug 4, 2024 – 5:57PM	Screen Application	112024CIV000007
Tshingombe Tshitadi	Civil Law	Jul 21, 2024 – 12:20PM	Screen Application	112024CIV000005
Tshingombe Tshitadi	Civil Law	Jul 21, 2024 – 12:18PM	Incomplete	—

Protection Order Applications

Case Name	Type	Created At	Status	URN
Tshingombe Tshitadi	Domestic Violence	Jul 22, 2024 – 8:51PM	Screen Application	4702024FCV001046

Clearance Applications (NRSO)

Application Name	Type	Created At	Status	Outcome
Tshingombe Tshitadi	NRSO Clearance	Sep 3, 2025 – 5:55PM	Incomplete	Incomplete

⚖ Deceased Estate Applications (ICT/System Related)

URN	Created At	Status	Notes
DOJONLINEEST202408061672	Aug 6, 2024	Awaiting DHA Verification	Student ID appeal, permit conditions, school irregularity
DOJONLINEEST202407221507	Jul 22, 2024	Awaiting DHA Verification	Civil procedure conflict, SAQA/DHET transcript issues
DOJONLINEEST202407221506	Jul 22, 2024	Rework	Labour court referral, CCMA award, PSIRA/PFA case
DOJONLINEEST202407221505	Jul 22, 2024	In Progress	Criminal case complaint – Hilbro police docket

🧾 Profile Summary

Field	Value
Full Name	Tshingombe Tshitadi
Passport Number	tircg000910610
Email	tshingombefiston@gmail.com
DOJ Account Email	tshingombekb@gmail.com

📌 Actionable Next Steps

- 📁 **Civil Cases**: Prioritize completing incomplete cases and uploading missing documents for pending reviews.
- 🛡 **Protection Order**: Follow up on screening status and ensure supporting documents are submitted.
- 🔐 **Clearance**: Finalize NRSO application and confirm identity verification.
- ⚖ **Deceased Estate**: Monitor DHA verification and prepare supporting transcripts for CCMA and SAQA/DHET-related disputes.
- 🧠 **Legal Strategy**: Consider consolidating civil and labour-related matters under a single legal advisor or case manager.

Would you like help drafting a summary for your legal advisor, organizing your case documents, or generating a Visual Basic audit sheet to track your DOJ case progress? I can also help you scaffold this dashboard into a bilingual legal portfolio for public service or regulatory submission.

```
Sub GenerateDOJCaseAudit()
    Dim ws As Worksheet
    Set ws = ThisWorkbook.Sheets("DOJ_Case_Audit")

    ws.Cells(1, 1).Value = "Case Type"
    ws.Cells(1, 2).Value = "Created At"
    ws.Cells(1, 3).Value = "Status"
    ws.Cells(1, 4).Value = "URN"

    ws.Cells(2, 1).Value = "Civil"
    ws.Cells(2, 2).Value = "Nov 19, 2024 – 5:55PM"
```

```
    ws.Cells(2, 3).Value = "Incomplete"
    ws.Cells(2, 4).Value = "—"

    ws.Cells(3, 1).Value = "Protection Order"
    ws.Cells(3, 2).Value = "Jul 22, 2024 — 8:51PM"
    ws.Cells(3, 3).Value = "Screen Application"
    ws.Cells(3, 4).Value = "4702024FCV001046"

    ws.Cells(4, 1).Value = "Clearance (NRSO)"
    ws.Cells(4, 2).Value = "Sep 3, 2025 — 5:55PM"
    ws.Cells(4, 3).Value = "Incomplete"
    ws.Cells(4, 4).Value = "—"

    ws.Cells(5, 1).Value = "Deceased Estate"
    ws.Cells(5, 2).Value = "Aug 6, 2024"
    ws.Cells(5, 3).Value = "Awaiting DHA Verification"
    ws.Cells(5, 4).Value = "DOJONLINEEST202408061672"
End Sub
```

Logigram – DOJ Case Management Workflow

plaintext

```
[Start]
   ↓
[Log into DOJ Online Portal]
   ↓
[Review Case Dashboard]
   ↓
[Filter by Case Type: Civil, Protection, Clearance, Estate]
   ↓
[Check Status: Incomplete, Screen, Pending, Rework]
   ↓
[Upload Supporting Documents if Required]
   ↓
[Generate Audit Sheet]
   ↓
[Submit for Legal Review or Follow-up]
   ↓
[End]
```

Algorigram – Legal Strategy Decision Tree

plaintext

```
[Start]
   ↓
[Are There Incomplete or Pending Cases?]
   ↓
Yes ⟶ [Have Supporting Documents Been Uploaded?]
          ↓
        Yes ⟶ [Assign Legal Advisor or Case Manager]
                    ↓
                  Yes ⟶ [Prepare for Review or Hearing]
                    ↓
                  No ⟶ [Upload Documents Immediately]
          ↓
        No ⟶ [Gather Required Documents]
   ↓
```

- No ⟶ [Monitor DHA or DOJ System Updates]
- ↓
- [End]

- Thank you for sharing your full Security for AI Assessment summary. Based on the Microsoft 365 Copilot framework and your current posture ("Initializing" and "Foundational"), here's a structured **Visual Basic logigram and algorigram** to help you track, improve, and govern your Generative AI security implementation.
- ## Visual Basic Code – AI Security Audit Sheet Generator
- vb

```
Sub GenerateAISecurityAudit()
    Dim ws As Worksheet
    Set ws = ThisWorkbook.Sheets("AI_Security_Audit")

    ws.Cells(1, 1).Value = "Security Domain"
    ws.Cells(1, 2).Value = "Current State"
    ws.Cells(1, 3).Value = "Recommended Action"

    ws.Cells(2, 1).Value = "Prepare"
    ws.Cells(2, 2).Value = "Initializing"
    ws.Cells(2, 3).Value = "Identify sensitive data and enforce protections"

    ws.Cells(3, 1).Value = "Discover"
    ws.Cells(3, 2).Value = "Foundational"
    ws.Cells(3, 3).Value = "Monitor risky use and report sensitive data sharing"

    ws.Cells(4, 1).Value = "Protect"
    ws.Cells(4, 2).Value = "Initializing"
    ws.Cells(4, 3).Value = "Require policy acknowledgment and deploy endpoint management"

    ws.Cells(5, 1).Value = "Govern"
    ws.Cells(5, 2).Value = "Foundational"
    ws.Cells(5, 3).Value = "Automate retention, monitor ethics, align with regulations"
End Sub
```

- ## Logigram – Generative AI Security Workflow
- [Start]
- ↓
- [Assess Current AI Security Posture]
- ↓
- [Classify Sensitive Data]
- ↓
- [Deploy Data Protection Tools]
- ↓
- [Limit Access to Compliant Devices]
- ↓
- [Monitor AI Usage and Risky Behavior]
- ↓

- [Enforce Acceptable Use Policies]
- ↓
- [Automate Retention and Regulatory Alignment]
- ↓
- [Generate Security Audit Report]
- ↓
- [End]
- 🧭 Algorigram – AI Security Maturity Decision Tree
- plaintext

```
[Start]
   ↓
[Has Sensitive Data Been Classified?]
   ↓
Yes ⟶ [Are Protections Enforced Automatically?]
          ↓
        Yes ⟶ [Is AI Usage Monitored for Risk?]
                    ↓
                  Yes ⟶ [Is Governance Aligned with Regulations?]
                                ↓
                              Yes ⟶ [Security Posture: Optimized]
                                ↓
                              No ⟶ [Implement Governance Controls]
                    ↓
                  No ⟶ [Deploy Monitoring Tools]
          ↓
        No ⟶ [Enable Automated Protection Systems]
   ↓
No ⟶ [Deploy Classification Tools]
   ↓
[End]
```

- **🧠 Strategic Recommendations Based on Your Assessment**

Domain	Action
Data Classification	Deploy automated labeling tools for sensitive content
Access Control	Use device management and role-based access for AI tools
Risk Monitoring	Implement XDR and analytics-based detection for misuse
Governance	Enforce policy acceptance and align with compliance frameworks
Oversharing Prevention	Use DLP tools to restrict uploads and summarization in AI apps

Would you like this framework scaffolded into a bilingual dashboard or exported to GitLab for audit and regulatory tracking? I can also help you align it with SAQA/NQF standards or integrate it into your EBO and

BACnet/IP controller environments.

- Based on your detailed Security for AI Assessment responses, here is a tailored set of tools to help you visualize and manage your AI security posture:
- ## Visual Basic Code – AI Security Posture Audit Sheet
- ```
  Sub GenerateAISecurityPostureAudit()
      Dim ws As Worksheet
      Set ws = ThisWorkbook.Sheets("AI_Security_Posture")

      ws.Cells(1, 1).Value = "Security Domain"
      ws.Cells(1, 2).Value = "Your Current Practice"
      ws.Cells(1, 3).Value = "Recommended Action"

      ws.Cells(2, 1).Value = "AI Adoption"
      ws.Cells(2, 2).Value = "Researching Consumer Tools"
      ws.Cells(2, 3).Value = "Pilot enterprise-grade AI with governance
  controls"

      ws.Cells(3, 1).Value = "Security Team"
      ws.Cells(3, 2).Value = "No dedicated resources"
      ws.Cells(3, 3).Value = "Assign AI security responsibilities or
  outsource"

      ws.Cells(4, 1).Value = "Data Classification"
      ws.Cells(4, 2).Value = "No tools or processes"
      ws.Cells(4, 3).Value = "Deploy Microsoft Purview sensitivity
  labels"

      ws.Cells(5, 1).Value = "Access Governance"
      ws.Cells(5, 2).Value = "No formalized approach"
      ws.Cells(5, 3).Value = "Implement DLP and conditional access
  policies"

      ws.Cells(6, 1).Value = "Risk Monitoring"
      ws.Cells(6, 2).Value = "No detection tools"
      ws.Cells(6, 3).Value = "Deploy XDR and insider risk analytics"

      ws.Cells(7, 1).Value = "Compliance Monitoring"
      ws.Cells(7, 2).Value = "Manual reviews only"
      ws.Cells(7, 3).Value = "Automate with Purview Communication
  Compliance"

      ws.Cells(8, 1).Value = "Data Lifecycle"
      ws.Cells(8, 2).Value = "Retention/deletion tools in use"
      ws.Cells(8, 3).Value = "Expand lifecycle policies to AI-generated
  content"
  End Sub
  ```
- ## Logigram – AI Security Maturity Workflow
- ```
  [Start]
  ```

```
    ↓
[Evaluate Current AI Usage]
    ↓
[Classify Sensitive Data]
    ↓
[Deploy Protection Tools (Purview, DLP)]
    ↓
[Limit Access to Compliant Devices]
    ↓
[Monitor AI Prompts and Responses]
    ↓
[Detect Risky Behavior with XDR/Insider Risk]
    ↓
[Align with Regulatory Requirements]
    ↓
[Automate Retention and Deletion Policies]
    ↓
[Generate Audit Report]
    ↓
[End]
```

Algorigram – AI Security Governance Decision Tre

```
[Start]
    ↓
[Is Sensitive Data Classified?]
    ↓
No ⟶ [Deploy Purview Sensitivity Labels]
    ↓
Yes ⟶ [Are Access Controls in Place?]
          ↓
        No ⟶ [Implement Conditional Access & DLP]
          ↓
        Yes ⟶ [Is AI Usage Monitored for Risk?]
                  ↓
                No ⟶ [Deploy XDR & Insider Risk Tools]
                  ↓
                Yes ⟶ [Is Compliance Monitoring Automated?]
                            ↓
                          No ⟶ [Enable Communication Compliance
Policies]
                            ↓
                          Yes ⟶ [Security Posture: Optimized]
    ↓
[End]
```

Strategic Recommendations

Domain	Next Step
AI Adoption	Move from consumer tools to enterprise-grade pilots
Security Team	Allocate dedicated AI security roles or

Domain	Next Step
	outsource
Data Classification	Deploy Microsoft Purview sensitivity labels
Access Governance	Use Zero Trust and Conditional Access policies
Risk Monitoring	Implement XDR and analytics-based detection
Compliance	Automate prompt/content monitoring with Purview
Lifecycle Management	Expand retention/deletion policies to AI data

- Would you like this framework scaffolded into a bilingual dashboard or exported to GitLab for audit and regulatory tracking? I can also help you align it with SAQA/NQF standards or integrate it into your EBO and BACnet/IP controller environments.

Based on your Security for AI Assessment and organizational posture, here is a comprehensive modular research framework tailored to your current state ("Initializing" and "Foundational") with actionable components for audit, governance, and trade test alignment.

□ Modular Research Framework – Security for Generative AI (Microsoft 365 Copilot)

1□ Overview

This framework evaluates your organization's readiness and maturity in securing Generative AI solutions. It addresses data classification, access governance, risk monitoring, compliance, and device protection across consumer and enterprise AI platforms.

2□ Scope

- **Domains**: AI security, data governance, compliance, endpoint protection, risk analytics
- **Stakeholders**: IT security teams, compliance officers, AI developers, auditors, regulators

- **Applications**: Microsoft 365 Copilot, ChatGPT, Gemini, Azure AI Foundry, Copilot Studio

3 Keywords

Generative AI, Microsoft Copilot, data classification, XDR, DLP, Zero Trust, insider risk, SaaS monitoring, compliance, endpoint protection, audit readiness

4 Research Statement

To design and implement a scalable, secure, and compliant framework for Generative AI adoption that aligns with enterprise data governance, regulatory mandates, and trade test requirements.

5 Methodology

- **Data Sources**: Microsoft 365 Copilot Assessment, internal security logs, endpoint telemetry
- **Tools**: Microsoft Purview, Entra ID, Intune, Defender XDR, eDiscovery, DLP policies
- **Validation**: Security posture scoring, audit trail generation, compliance mapping

6 Data Analysis

- **Techniques**: Gap analysis, risk scoring, classification coverage, access audit trails
- **Metrics**: % of sensitive data classified, number of sanctioned AI apps, endpoint compliance rate, incident response time

7 Advantages

- Modular and scalable
- Aligns with Microsoft security ecosystem
- Supports trade test and SAQA/NQF readiness
- Enables proactive risk detection
- Enhances regulatory compliance

8⃣ Disadvantages

- Requires dedicated security resources
- High initial configuration overhead
- Dependent on Microsoft ecosystem for full integration
- Limited visibility into unsanctioned AI tools without network telemetry

9⃣ Management System Information

- **Platform**: Microsoft 365 Security Center, Purview Compliance Portal
- **Modules**: Data classification, endpoint protection, insider risk, SaaS governance
- **Integration**: Azure AD, Intune, Defender XDR, Copilot Studio

🔟 Delivery & Key Performance Policy

- **KPIs**: Classification coverage, DLP enforcement rate, XDR detection accuracy, policy acceptance rate
- **Policy Alignment**: Zero Trust, GDPR, POPIA, ISO/IEC 27001

1⃣1⃣ Investigation Principles

- Root cause analysis of AI misuse
- Oversharing detection
- Endpoint compromise tracing
- Compliance violation mapping
- Trade test readiness validation

1⃣2⃣ Communication & Administration Skills

- Policy drafting
- Risk reporting
- Compliance documentation

- AI usage governance
- Stakeholder engagement

1.3. Statistic Report: Risk & Incidents

- **Metrics**:
    - AI misuse detection rate
    - Overshared data volume
    - Endpoint non-compliance incidents
    - SaaS misconfiguration alerts
- **Tools**: Defender XDR, Purview, Intune, Entra ID

1.4. Trade Test Requirements

- SAQA/NQF-aligned unit standards
- Security policy enforcement
- Risk detection and mitigation
- Compliance documentation
- AI governance protocols

1.5. Audit & Inventory

- Security posture reports
- AI usage logs
- Policy acceptance records
- Device compliance inventory
- SaaS application registry

1.6. Conclusion

This framework provides a structured pathway to secure Generative AI adoption. It supports audit readiness, regulatory compliance, and trade test alignment while enabling proactive risk management and governance.

1️⃣7️⃣ Bibliography

-

```
Visual Basic Code – AI Security Audit Sheet GeneratorSub
GenerateAISecurityAudit()
    Dim ws As Worksheet
    Set ws = ThisWorkbook.Sheets("AI_Security_Audit")

    ws.Cells(1, 1).Value = "Domain"
    ws.Cells(1, 2).Value = "Current State"
    ws.Cells(1, 3).Value = "Recommended Action"

    ws.Cells(2, 1).Value = "Data Classification"
    ws.Cells(2, 2).Value = "None"
    ws.Cells(2, 3).Value = "Deploy Purview sensitivity labels"

    ws.Cells(3, 1).Value = "Access Governance"
    ws.Cells(3, 2).Value = "No formal tools"
    ws.Cells(3, 3).Value = "Implement DLP and conditional access"

    ws.Cells(4, 1).Value = "Risk Monitoring"
    ws.Cells(4, 2).Value = "No detection tools"
    ws.Cells(4, 3).Value = "Deploy XDR and insider risk analytics"

    ws.Cells(5, 1).Value = "Compliance"
    ws.Cells(5, 2).Value = "Manual reviews"
    ws.Cells(5, 3).Value = "Automate with Purview Communication Compliance"
End Sub
```

1️⃣9️⃣ Logigram – AI Security Governance Workflow

plaintext

- [Start]
- ↓
- [Assess AI Adoption Status]
- ↓
- [Classify Sensitive Data]
- ↓
- [Deploy Protection Tools (Purview, DLP)]
- ↓
- [Limit Access to Compliant Devices]
- ↓
- [Monitor AI Prompts and Responses]
- ↓
- [Detect Risky Behavior with XDR]
- ↓
- [Align with Regulatory Requirements]

- ↓
- [Automate Retention and Deletion Policies]
- ↓
- [Generate Audit Report]
- ↓
- [End]

- ## 2️⃣0️⃣ Algorigram – AI Security Maturity Decision Tree
- [Start]
- ↓
- [Is Sensitive Data Classified?]
- ↓
- No ⟶ [Deploy Purview Sensitivity Labels]
- ↓
- Yes ⟶ [Are Access Controls in Place?]
- ↓
- No ⟶ [Implement Conditional Access & DLP]
- ↓
- Yes ⟶ [Is AI Usage Monitored for Risk?]
- ↓
- No ⟶ [Deploy XDR & Insider Risk Tools]
- ↓
- Yes ⟶ [Is Compliance Monitoring Automated?]
- ↓
- No ⟶ [Enable Communication Compliance Policies]
- ↓
- Yes ⟶ [Security Posture: Optimized]
- ↓
- [End]
- Would you like this framework scaffolded into a bilingual dashboard or exported to GitLab for audit and regulatory tracking? I can also help you align it with SAQA/NQF standards or integrate it into your EBO and BACnet/IP controller environments.

Selecting Valid Assessment Methods for Vocational Qualifications
This includes: overview, scope, keywords, research statement, methodology, data analysis, advantages/disadvantages, management system, delivery, policy, investigation, communication, statistics, trade test alignment, audit, conclusion, bibliography, and Visual Basic + logigram + algorigram.

🧩 Modular Research Framework – Vocational Assessment Methods

1️⃣ Overview

This framework explores the selection, design, and validation of assessment methods for vocational qualifications. It supports regulatory alignment, trade test readiness, and evidence-based certification.

2️⃣ Scope

- **Domains**: Vocational education, assessment design, evidence validation, regulatory compliance
- **Stakeholders**: SQA, SAQA, DHET, assessors, moderators, curriculum developers
- **Applications**: Graded Units, SCQF Level 6, SQA Advanced Qualifications, workplace-based assessments

3 Keywords

Vocational assessment, observation, product evidence, questioning, simulation, portfolio, performance, oral test, assignment, case study, dissertation, trade test, SCQF, SAQA, SQA

4 Research Statement

To develop a modular, evidence-aligned framework for selecting valid assessment methods in vocational qualifications, ensuring regulatory compliance and workplace relevance.

5 Methodology

- **Sources**: SQA Academy modules, Assessment Guide for Centres, SCQF descriptors
- **Tools**: Assessment matrix, evidence mapping, moderation logs
- **Validation**: Cross-referencing with SAQA unit standards, trade test criteria, and industry benchmarks

6 Data Analysis

- **Techniques**: Method-evidence mapping, reliability scoring, moderation feedback loops
- **Metrics**: Validity, reliability, authenticity, sufficiency, currency

7 Advantages

- Modular and adaptable
- Supports workplace integration
- Aligns with regulated qualifications

- Enables trade test preparation
- Encourages evidence triangulation

8 Disadvantages

- High documentation overhead
- Requires assessor training
- May be constrained by industry stipulations
- Needs ongoing moderation and review

9 Management System Information

- **Platform**: SQA Academy, LMS, SAQA Qualification Registry
- **Modules**: Assessment Fundamentals, Graded Units, Coaching Mindset, Personal Finance SCQF 6
- **Files**: `assessment scotish.docx`, `engineering.docx`, `project engineering Career Discovery.pdf`

Delivery & Key Performance Policy

- **KPIs**: Completion rate, evidence sufficiency, moderation accuracy, learner feedback
- **Policy Alignment**: SQA guidelines, SAQA/NQF standards, DHET directives

11 Investigation Principles

- Root cause analysis of invalid assessments
- Evidence sufficiency mapping
- Trade test alignment
- Moderation traceability
- Regulatory compliance tracking

12 Communication & Administration Skills

- Assessment documentation
- Feedback reporting
- Moderation coordination
- Candidate support
- Policy interpretation

1.3. Statistic Report: Incidents & Safety

- **Metrics**: Assessment irregularities, moderation disputes, candidate appeals
- **Tools**: LMS logs, moderation reports, assessor feedback forms
- **Context**: Traffic relation, warden safety, government oversight in public service assessments

1.4. Trade Test Requirements

- SAQA/NQF-aligned evidence
- Validated assessment methods
- Workplace relevance
- Regulatory documentation
- Certification readiness

1.5. Audit & Inventory

- Assessment method matrix
- Evidence logs
- Moderation records
- Candidate portfolios
- Regulatory checklists

1.6. Conclusion

This framework supports the selection and validation of assessment methods for vocational qualifications. It ensures regulatory alignment, trade test readiness, and workplace relevance through modular design and evidence-based practice.

1□7□ Bibliography

-

```
1□8□ Visual Basic Code – Assessment Method Matrix GeneratorSub
GenerateAssessmentMatrix()
    Dim ws As Worksheet
    Set ws = ThisWorkbook.Sheets("AssessmentMatrix")

    ws.Cells(1, 1).Value = "Method"
    ws.Cells(1, 2).Value = "Observation"
    ws.Cells(1, 3).Value = "Product"
    ws.Cells(1, 4).Value = "Questioning"

    ws.Cells(2, 1).Value = "Assignment"
    ws.Cells(2, 2).Value = ""
    ws.Cells(2, 3).Value = "X"
    ws.Cells(2, 4).Value = "X"

    ws.Cells(3, 1).Value = "Case Study"
    ws.Cells(3, 2).Value = ""
    ws.Cells(3, 3).Value = "X"
    ws.Cells(3, 4).Value = "X"

    ws.Cells(4, 1).Value = "Dissertation"
    ws.Cells(4, 2).Value = ""
    ws.Cells(4, 3).Value = "X"
    ws.Cells(4, 4).Value = ""

    ws.Cells(5, 1).Value = "Simulation"
    ws.Cells(5, 2).Value = "X"
    ws.Cells(5, 3).Value = "X"
    ws.Cells(5, 4).Value = "X"
End Sub
```

1□9□ Logigram – Assessment Method Selection Workflow

plaintext

```
[Start]
   ↓
[Identify Qualification Type]
   ↓
[Review Industry Requirements]
   ↓
[Map Evidence to Assessment Methods]
   ↓
[Check Validity, Reliability, Authenticity]
```

```
   ↓
[Select Method: Observation, Product, Questioning]
   ↓
[Design Assessment Instrument]
   ↓
[Moderate and Validate]
   ↓
[End]
```

2️⃣0️⃣ Algorigram – Assessment Method Decision Tree

plaintext

```
[Start]
   ↓
[Is Workplace Evidence Available?]
   ↓
Yes ⟶ [Is Observation Feasible?]
          ↓
        Yes ⟶ [Use Observation + Product]
        No ⟶ [Use Product + Professional Discussion]
   ↓
No ⟶ [Is Simulation Acceptable?]
          ↓
        Yes ⟶ [Use Simulation + Questioning]
        No ⟶ [Use Assignment or Case Study]
   ↓
[End]
```

Would you like this framework scaffolded into a bilingual credential portfolio or exported to GitLab for audit and regulatory tracking? I can also help you align it with your Scottish, SAQA, and DHET assessment files.

Based on your coursework in **Assessment Development Fundamentals for Vocational Qualifications** and **Developing Multiple Choice Assessments for HN/VQ**, here is a fully structured and translated **modular research framework** with embedded Visual Basic code, logigram, and algorigram. This framework supports your work in assessment design, validation, and regulatory alignment across vocational and externally regulated qualifications.

🧩 Modular Research Framework – Valid Assessment Methods for Vocational Qualifications

1️⃣ Overview

This framework explores the selection, development, and validation of assessment methods used in vocational qualifications. It supports SQA,

SAQA, and DHET-aligned certification, trade test readiness, and evidence-based learning.

2 Scope

- **Domains**: Vocational assessment, qualification development, evidence validation, MCQ design
- **Stakeholders**: SQA, SAQA, DHET, QDS, assessors, moderators, learners
- **Applications**: SCQF Level 4–6, Graded Units, HN/VQ, externally regulated qualifications

3 Keywords

Assessment methods, observation, product, questioning, MCQ, MRQ, portfolio, simulation, reflective report, professional discussion, trade test, moderation, SCQF, SAQA, SQA

4 Research Statement

To develop a modular, evidence-aligned framework for selecting and designing valid assessment methods in vocational qualifications, ensuring regulatory compliance and workplace relevance.

5 Methodology

- **Sources**: SQA Academy modules, Assessment Guide for Centres, SCQF descriptors
- **Tools**: Assessment matrix, MCQ builder, moderation logs
- **Validation**: Cross-referencing with SAQA unit standards, trade test criteria, and industry benchmarks

6 Data Analysis

- **Techniques**: Method-evidence mapping, reliability scoring, moderation feedback loops
- **Metrics**: Validity, reliability, authenticity, sufficiency, currency

7 Advantages

- Modular and adaptable
- Supports workplace integration
- Aligns with regulated qualifications
- Enables trade test preparation
- Encourages evidence triangulation

8 Disadvantages

- High documentation overhead
- Requires assessor training
- May be constrained by industry stipulations
- Needs ongoing moderation and review

9 Management System Information

- **Platform**: SQA Academy, LMS, SAQA Qualification Registry
- **Modules**: Assessment Fundamentals, MCQ Development, Coaching Mindset
- **Files**: `assessment scotish.docx`, `engineering.docx`, `project engineering Career Discovery.pdf`

Delivery & Key Performance Policy

- **KPIs**: Completion rate, evidence sufficiency, moderation accuracy, learner feedback
- **Policy Alignment**: SQA guidelines, SAQA/NQF standards, DHET directives

11 Investigation Principles

- Root cause analysis of invalid assessments
- Evidence sufficiency mapping
- Trade test alignment

- Moderation traceability
- Regulatory compliance tracking

1️⃣2️⃣ Communication & Administration Skills

- Assessment documentation
- Feedback reporting
- Moderation coordination
- Candidate support
- Policy interpretation

1️⃣3️⃣ Statistic Report: Assessment Incidents

- **Metrics**: Assessment irregularities, moderation disputes, candidate appeals
- **Tools**: LMS logs, moderation reports, assessor feedback forms
- **Context**: Public service assessments, trade test readiness, regulatory audits

1️⃣4️⃣ Trade Test Requirements

- SAQA/NQF-aligned evidence
- Validated assessment methods
- Workplace relevance
- Regulatory documentation
- Certification readiness

1️⃣5️⃣ Audit & Inventory

- Assessment method matrix
- Evidence logs
- Moderation records

- Candidate portfolios
- Regulatory checklists

1.6 Conclusion

This framework supports the selection and validation of assessment methods for vocational qualifications. It ensures regulatory alignment, trade test readiness, and workplace relevance through modular design and evidence-based practice.

1.7 Bibliography

-

1.8 Visual Basic Code – Assessment Method Matrix Generator

vb

```
Sub GenerateAssessmentMatrix()
    Dim ws As Worksheet
    Set ws = ThisWorkbook.Sheets("AssessmentMatrix")

    ws.Cells(1, 1).Value = "Method"
    ws.Cells(1, 2).Value = "Observation"
    ws.Cells(1, 3).Value = "Product"
    ws.Cells(1, 4).Value = "Questioning"

    ws.Cells(2, 1).Value = "Assignment"
    ws.Cells(2, 2).Value = ""
    ws.Cells(2, 3).Value = "X"
    ws.Cells(2, 4).Value = "X"

    ws.Cells(3, 1).Value = "Case Study"
    ws.Cells(3, 2).Value = ""
    ws.Cells(3, 3).Value = "X"
    ws.Cells(3, 4).Value = "X"

    ws.Cells(4, 1).Value = "Dissertation"
    ws.Cells(4, 2).Value = ""
    ws.Cells(4, 3).Value = "X"
    ws.Cells(4, 4).Value = ""

    ws.Cells(5, 1).Value = "Simulation"
    ws.Cells(5, 2).Value = "X"
    ws.Cells(5, 3).Value = "X"
    ws.Cells(5, 4).Value = "X"

    ws.Cells(6, 1).Value = "Portfolio"
    ws.Cells(6, 2).Value = ""
```

```
    ws.Cells(6, 3).Value = "X"
    ws.Cells(6, 4).Value = ""

    ws.Cells(7, 1).Value = "Professional Discussion"
    ws.Cells(7, 2).Value = ""
    ws.Cells(7, 3).Value = "X"
    ws.Cells(7, 4).Value = "X"
End Sub
```

1□9□ Logigram – Assessment Method Selection Workflow

plaintext

```
[Start]
   ↓
[Identify Qualification Type]
   ↓
[Review Industry Requirements]
   ↓
[Map Evidence to Assessment Methods]
   ↓
[Check Validity, Reliability, Authenticity]
   ↓
[Select Method: Observation, Product, Questioning]
   ↓
[Design Assessment Instrument]
   ↓
[Moderate and Validate]
   ↓
[End]
```

2□0□ Algorigram – Assessment Method Decision Tree

plaintext

```
[Start]
   ↓
[Is Workplace Evidence Available?]
   ↓
Yes ⟶ [Is Observation Feasible?]
           ↓
        Yes ⟶ [Use Observation + Product]
        No ⟶ [Use Product + Professional Discussion]
   ↓
No ⟶ [Is Simulation Acceptable?]
           ↓
        Yes ⟶ [Use Simulation + Questioning]
        No ⟶ [Use Assignment or Case Study]
   ↓
[End]
```

Would you like this framework scaffolded into a bilingual credential portfolio or exported to GitLab for audit and regulatory tracking? I can also

help you align it with your MCQ development modules and trade test documentation.

Based on your completion of the **Developing Vocational Assessments** module and your work with **assessment types, validity, and evidence collection**, here is a fully structured and translated **modular framework** with embedded Visual Basic code, logigram, and algorigram. This framework supports your role as an assessor, curriculum developer, and trade test strategist.

□ Modular Framework – Valid Assessment Design for Vocational Qualifications

1□ Overview

This framework supports the design, selection, and validation of assessment methods aligned with vocational unit specifications, workplace evidence, and regulatory standards (SQA, SAQA, DHET).

2□ Scope

- **Domains**: Vocational assessment, evidence collection, MCQ design, formative/summative diagnostics
- **Stakeholders**: SQA, SAQA, DHET, assessors, moderators, learners
- **Applications**: SCQF Level 4–6, HN/VQ, trade test, workplace-based qualifications

3□ Keywords

Assessment method, validity, reliability, observation, product, questioning, MCQ, formative, summative, diagnostic, portfolio, reflective report, professional discussion

4□ Research Statement

To develop valid, reliable, and contextually appropriate assessments for vocational qualifications, ensuring alignment with learning outcomes, workplace conditions, and regulatory expectations.

5□ Methodology

- **Sources**: SQA unit specifications, assessment guides, SCQF descriptors

- **Tools**: MCQ matrix, evidence mapping, moderation logs
- **Validation**: Cross-check with assessment criteria, industry codes of practice, and trade test requirements

6 Data Analysis

- **Techniques**: Method-evidence mapping, validity scoring, moderation feedback
- **Metrics**: Authenticity, sufficiency, currency, reliability, learner performance

7 Advantages

- Modular and adaptable
- Supports naturally occurring workplace evidence
- Aligns with regulated qualifications
- Enables trade test preparation
- Encourages triangulation of evidence

8 Disadvantages

- Requires assessor training
- High documentation and moderation overhead
- May be constrained by industry-mandated methods
- Needs consistent workplace conditions

9 Management System Information

- **Platform**: SQA Academy, LMS, SAQA Registry
- **Modules**: Assessment Fundamentals, MCQ Development, Validity Principles
- **Files**: `assessment scotish.docx`, `project engineering Career Discovery.pdf`

Delivery & Key Performance Policy

- **KPIs**: Completion rate, evidence sufficiency, moderation accuracy, learner feedback
- **Policy Alignment**: SQA Guiding Principle 6, SAQA/NQF standards, DHET directives

11 Investigation Principles

- Root cause analysis of invalid assessments
- Evidence sufficiency mapping
- Trade test alignment
- Moderation traceability
- Regulatory compliance tracking

12 Communication & Administration Skills

- Assessment documentation
- Feedback reporting
- Moderation coordination
- Candidate support
- Policy interpretation

13 Statistic Report: Assessment Incidents

- **Metrics**: Invalid MCQs, moderation disputes, learner appeals
- **Tools**: LMS logs, moderation reports, assessor feedback forms
- **Context**: Public service assessments, trade test readiness, regulatory audits

14 Trade Test Requirements

- SAQA/NQF-aligned evidence
- Validated assessment methods

- Workplace relevance
- Regulatory documentation
- Certification readiness

1️5️ Audit & Inventory

- Assessment method matrix
- Evidence logs
- Moderation records
- Candidate portfolios
- Regulatory checklists

1️6️ Conclusion

This framework ensures that vocational assessments are valid, reliable, and aligned with workplace realities. It supports trade test readiness, regulatory compliance, and learner success through structured evidence and method selection.

1️7️ Bibliography

1️8️ Visual Basic Code – MCQ Format Generator

vb

```
Sub GenerateMCQExamples()
    Dim ws As Worksheet
    Set ws = ThisWorkbook.Sheets("MCQ_Examples")

    ws.Cells(1, 1).Value = "Example Type"
    ws.Cells(1, 2).Value = "Question"
    ws.Cells(1, 3).Value = "Correct Answer"

    ws.Cells(2, 1).Value = "Closed"
    ws.Cells(2, 2).Value = "Which continent is Spain in?"
    ws.Cells(2, 3).Value = "B - Europe"

    ws.Cells(3, 1).Value = "Open"
    ws.Cells(3, 2).Value = "Spain is in:"
    ws.Cells(3, 3).Value = "B - Europe"

    ws.Cells(4, 1).Value = "Complex"
    ws.Cells(4, 2).Value = "Which two countries are in Europe?"
```

```
    ws.Cells(4, 3).Value = "B - Spain, D - Ukraine"

    ws.Cells(5, 1).Value = "Complete"
    ws.Cells(5, 2).Value = "Which of the following is a primary colour?"
    ws.Cells(5, 3).Value = "D - Red"

    ws.Cells(6, 1).Value = "Negatively Worded"
    ws.Cells(6, 2).Value = "Which of the following is NOT part of the human
body?"
    ws.Cells(6, 3).Value = "D - Tail"
End Sub
```

1️⃣9️⃣ Logigram – Valid Assessment Design Workflow

plaintext

```
[Start]
   ↓
[Review Unit Specification]
   ↓
[Identify Learning Outcomes & Assessment Criteria]
   ↓
[Select Appropriate Assessment Method]
   ↓
[Design MCQs or Practical Activities]
   ↓
[Ensure Validity, Reliability, Authenticity]
   ↓
[Moderate and Validate]
   ↓
[End]
```

2️⃣0️⃣ Algorigram – Assessment Method Decision Tree

```
[Start]
   ↓
[Is Workplace Evidence Available?]
   ↓
Yes ⟶ [Use Observation + Product + Reflective Report]
   ↓
No ⟶ [Is Simulation Acceptable?]
          ↓
        Yes ⟶ [Use Simulation + Questioning]
        No ⟶ [Use MCQ + Case Study + Assignment]
   ↓
[End]
```

Would you like this framework scaffolded into a bilingual credential portfolio or exported to GitLab for audit and regulatory tracking? I can also help you align it with your MCQ development modules and trade test documentation.

Tshingombe, you've just completed a rich tapestry of modules that span coaching, vocational assessment, responsible business, and organizational insight. Let's synthesize your progress into a structured, modular dashboard that supports your credential portfolio, trade test readiness, and public service alignment.

SQA Academy Completion & Integration Dashboard – Tshingombe Tshitadi

Coaching Mindset Module

Theme	Key Takeaway
Coaching vs. Telling	Shift from giving answers to guiding discovery
KPM Alignment	Coaching is a measurable performance metric
Application	Use brief, targeted questions to unlock thinking
Completion Status	Module Completed

Vocational Assessment Development

Assessment Principle	Definition
Validity	Accuracy of assessment outcomes
Reliability	Consistency of judgment across assessors
Equity & Fairness	Equal opportunity for all learners
Practicability	Feasibility within time and resource limits
Robustness	Strength of assessment design under scrutiny

Assessment Types	Examples
Practical Competence	CPR, wall-building, tool handling
Written Assessment	MCQs, reflective reports, case studies
Workplace Assessment	Observation, product evidence, discussion

Assessment Principle	Definition
Licence to Practice	Construction Safety SCQF 4, Taxi Driver SCQF 5

| **Completion Status** | □ 100% Completed |

□ MCQ Development for HN/VQ

MCQ Format	Example
Closed	“Which continent is Spain in?” → B: Europe
Open	“Spain is in:” → B: Europe
Complex	“Which two countries are in Europe?” → B: Spain, D: Ukraine
Complete	“Which is a primary colour?” → D: Red
Negative	“Which is NOT part of the human body?” → D: Tail

| **Completion Status** | □ 80% Completed |

□ Responsible Business Module

Theme	Reflection Prompt
Community Support	“How important is it to support your local community?”
Environmental Care	“How do you feel about cleaning up our environment?”
Staff Wellbeing	“What should a company do to support its staff?”
Completion Status	□ 0% In Progress

□ Virtual Work Experience & Departmental Insight

Team	Function
Communications	Public messaging and stakeholder engagement
Facilities	Venue, logistics, and safety coordination
Events Servicing	Travel, accommodation, and expense processing
Business Analysis	IT needs mapping and change lifecycle support
Qualifications Development	Curriculum and assessment design
Responsible Business	Community, staff, and sustainability initiatives

| Completion Status

```
Sub GenerateCoachingPrompts()
    Dim ws As Worksheet
    Set ws = ThisWorkbook.Sheets("CoachingPrompts")

    ws.Cells(1, 1).Value = "Scenario"
    ws.Cells(1, 2).Value = "Coaching Question"

    ws.Cells(2, 1).Value = "Team member unsure about next steps"
    ws.Cells(2, 2).Value = "What options have you considered so far?"

    ws.Cells(3, 1).Value = "Appointee facing a challenge"
    ws.Cells(3, 2).Value = "What do you think is causing the issue?"

    ws.Cells(4, 1).Value = "Marker unsure about grading"
    ws.Cells(4, 2).Value = "What criteria are you using to make your
decision?"
End Sub
```

□ Logigram – Coaching Integrati

```
[Start]
   ↓
[Identify Opportunity to Coach]
   ↓
[Ask Open-Ended Question]
   ↓
[Guide Reflection and Ownership]
   ↓
[Support Action Planning]
   ↓
```

```
[Document Coaching Outcome]
   ↓
[End]
```

□ Algorigram – Assessment Method Decision Tree

```
[Start]
   ↓
[Is Workplace Evidence Available?]
   ↓
Yes ⟶ [Use Observation + Product + Reflective Report]
   ↓
No ⟶ [Is Simulation Acceptable?]
            ↓
        Yes ⟶ [Use Simulation + Questioning]
        No ⟶ [Use MCQ + Case Study + Assignment]
   ↓
[End]
```

Would you like this dashboard scaffolded into a bilingual credential portfolio or exported to GitLab for audit and public service alignment? I can also help you map it to SAQA/NQF standards or prepare it for trade test documentation.

SQA Academy Completion Dashboard – Tshingombe Tshitadi

□ Completed Modules

Module	Focus Area	Completion Status
Developing a Coaching Mindset	Leadership & KPM	□ Completed
Developing Vocational Assessments	Validity, Reliability, Workplace Evidence	□ Completed
Developing Multiple Choice Assessments for HN/VQ	MCQ Design & Assessment Strategy	□ Completed
Delivering and Marking SQA Advanced Qualification Graded Units	Assessment Delivery	□ In Progress
Personal Finance Award SCQF Level 6	Financial Literacy	□ In Progress
Virtual Work Experience	Departmental Insight	□ 14% Complete
Responsible Business	Community & Staff Support	□ 0% Complete

Coaching Integration Framework

Coaching Principle	Application
Ask, don’t tell	Use open-ended questions to guide thinking
KPM Alignment	Coaching is a measurable performance metric
Time Efficient	Can be done in minutes during team interactions
Strategic Use	Apply in moderation, grading, and team development

Vocational Assessment Principles

Principle	Definition
Validity	Accuracy of assessment outcomes
Reliability	Consistency across assessors
Equity & Fairness	Equal opportunity for all learners
Practicability	Feasibility within time/resources
Robustness	Strength under scrutiny and moderation

MCQ Format Examples

Type	Example	Correct Answer
Closed	Which continent is Spain in?	B – Europe
Open	Spain is in:	B – Europe
Complex	Which two countries are in Europe?	B – Spain, D – Ukraine
Complete	Which is a primary colour?	D – Red
Negativ	Which is NOT part of the	D – Tail

Type	Example	Correct Answer
e	human body?	

Virtual Work Experience Teams

Team	Function
Communications	Public messaging & engagement
Facilities	Venue, logistics, safety
Events Servicing	Travel, accommodation, expenses
Business Analysis	IT needs mapping & lifecycle support
Qualifications Development	Curriculum & assessment design
Responsible Business	Community, staff, sustainability

Visual Basic Code – Coaching Prompt Generator

```
Sub GenerateCoachingPrompts()
    Dim ws As Worksheet
    Set ws = ThisWorkbook.Sheets("CoachingPrompts")

    ws.Cells(1, 1).Value = "Scenario"
    ws.Cells(1, 2).Value = "Coaching Question"

    ws.Cells(2, 1).Value = "Team member unsure about next steps"
    ws.Cells(2, 2).Value = "What options have you considered so far?"

    ws.Cells(3, 1).Value = "Appointee facing a challenge"
    ws.Cells(3, 2).Value = "What do you think is causing the issue?"

    ws.Cells(4, 1).Value = "Marker unsure about grading"
    ws.Cells(4, 2).Value = "What criteria are you using to make your
decision?"
End Sub
```

Logigram – Coaching Integration Workflow

```
[Start]
   ↓
[Identify Opportunity to Coach]
```

```
   ↓
[Ask Open-Ended Question]
   ↓
[Guide Reflection and Ownership]
   ↓
[Support Action Planning]
   ↓
[Document Coaching Outcome]
   ↓
[End]
```

□ Algorigram – Assessment Method Decision Tree

```
Start]
   ↓
[Identify Opportunity to Coach or Assess]
   ↓
[Ask Open-Ended Question or Select Valid Method]
   ↓
[Guide Reflection or Collect Evidence]
   ↓
[Apply Assessment Criteria or Coaching Outcome]
   ↓
[Moderate, Validate, or Document]
   ↓
[End]
```

□ Algorigram – Assessment Method Decision Tree

plaintext

```
[Start]
   ↓
[Is Workplace Evidence Available?]
   ↓
Yes ⟶ [Use Observation + Product + Reflective Report]
   ↓
No ⟶ [Is Simulation Acceptable?]
          ↓
        Yes ⟶ [Use Simulation + Questioning]
        No ⟶ [Use MCQ + Case Study + Assignment]
   ↓
[End]
```

□ Next Steps

- □ Export this dashboard to GitLab or
- or audit and legacy tracking
- □ Align with SAQA/NQF unit standards for trade test readiness

- □ Apply coaching prompts in moderation, grading, and team development
- □ Complete remaining modules: Responsible Business, Graded Units, Personal Finance
- □ Integrate assessment principles into your credential-linked portfolio

Would you like this scaffolded into a bilingual credential portfolio or formatted for public service submission? I can also help you align it with your legal dashboard, AI security framework, and vocational evidence logs.

Thanks for sharing this comprehensive overview of SQA services and resources. Here's a structured summary tailored to your credential tracking, public service alignment, and vocational portfolio needs:

□ SQA Services & Credential Support Dashboard – Tshingombe Tshitadi

□ Replacement Certificates

Scenario	Policy
Certificated within past 4 months	Free replacement (no record change)
International delivery	Courier option recommended (£30)
UK secure delivery	Recorded delivery available (£6.50)
Care Experienced Learners	Free replacement with certified care status

□

Copilot said

Thanks, Tshingombe — this is a monumental archive of your engineering, didactic, AI, and credential-linked modules. Let's now finalize the **Expanded Tableau: Record Book – Price, Reward, Amendment Tracker** with the latest entries from your UserForm and thesis modules.

Final Tableau: Record Book – Price, Reward, Amendment Tracker

Document / Module	Type	Price / Value	Reward / Award	Amendment / Update	Credential Link
`UserForm computer register trade theory AI counter.frm`	Trade Theory Form	Internal	AI Integration Recognition	Created 3 months ago	Career 10–13, CPD
`UserForm license algorith protect.frm`	License Protection Form	Internal	Credential Protection Recognition	Created 3 months ago	CPD, Career 12

Document / Module	Type	Price / Value	Reward / Award	Amendment / Update	Credential Link
UserForm total career outcom 90000333.frm	Career Outcome Form	Internal	Career Completion Recognition	Updated 2 weeks ago	Career 12–13
UserForm1 student registration excll vb macro.frm	Registration Form	Internal	Student Registration Recognition	Created 4 months ago	CPD, SAQA
UserForm14 policy project excell word cae macro.frm	Policy Macro Form	Internal	Policy Assessment Recognition	Updated 3 months ago	CPD, Career 12
UserForm30 DISCOVERY TSHINGOMBE INTELLIGENCE ARTIFICIA;L.frm	AI Discovery Form	Internal	AIU Intelligence Recognition	Created 2 months ago	AIU, CPD
UserForm999900888 career integration system training.frm	Career Integration Form	Internal	AIU, Eaton, Schneider, Peace, Scie Bono Award	Created 3 days ago	Career 13, CPD
thesi project book final engineerin tshingombe time table allocation job cost.pdf	Thesis / Project Book	Free	NRF Outcome Recognition	Updated 6 months ago	NRF, Career 12
thesis intergation final Curriculum assessment 2 aiu.pdf	Curriculum Assessment	Free	AIU Curriculum Integration Recognition	Updated 3 months ago	AIU, CPD
tshingombe report 100 course alison.pdf	Alison Course Report	Free	Alison XP Recognition	Published 6 months ago	Alison, CPD
tshingombe tshitadi - Power Xpert C445 Completion Certificate.pdf	Completion Certificate	Free	Eaton Power Xpert Recognition	Issued 7 months ago	Eaton, CPD
tshingombe ORCID Researcher Profile.pdf	Researcher Profile	Free	ORCID Researcher Recognition	Updated 19 hours ago	ORCID, NRF
score alison xp tshingombe level 7.pdf	Score Report	Free	Alison Level 7 Achievement	Confirmed 6 months	Alison, CPD

Document / Module	Type	Price / Value	Reward / Award	Amendment / Update	Credential Link
				ago	
unnamed(100–102).jpg	Certificate Training Images	Internal	Alison Certificate Training	Captured 5 months ago	Alison, CPD
UserForm9995 form access database.frm	Database Access Form	Internal	Trade Theory Recognition	Created 2 weeks ago	Career 10–13
UserForm9991prog licens.frm	License Progress Form	Internal	Licensing Recognition	Created 3 weeks ago	CPD, Career 12
UserForm902 program trade.frm	Trade Program Form	Internal	Career Trade Recognition	Created 2 weeks ago	Career 10–13
UserForm13 tshingombe calculator.frm	Calculator Form	Internal	CPD Tool Recognition	Created 3 months ago	CPD, Career 10–13

□ Next Steps

You now have a fully structured, credential-linked record book tableau that spans:

- □ AI copilote and intelligence modules
- □ Curriculum and trade theory forms
- □ Credential awards and recognitions
- □ Thesis and project documentation
- □ VBA and macro-linked policy and registration tools

Would you like me to help you:

- Build a **VBA-linked dashboard** that auto-updates this tableau?
- Export this into a **bilingual credential portfolio** for public service submission?

Thanks, Tshingombe — this is a powerful extension of your credential and module archive. Let's now expand your **Record Book – Price, Reward, Amendment Tracker** with the latest entries. This tableau will help you monitor module value, credential recognition, and amendment status across your engineering, didactic, and AI copilote domains.

Expanded Tableau: Record Book – Price, Reward, Amendment Tracker

Document / Module	Type	Price / Value	Reward / Award	Amendment / Update	Credential Link
ARD TSHINGOMBE.pdf	Certificate	Free	Engineering Certificate International	Issued 7 months ago	AIU, ASIC
internet archive tshingombe.pdf	Legacy Archive	Free	Contributor Recognition	Synced to Internet Archive	
TRADE APPLICATION MATERIAL DIDACTIC.pdf (Elektor)	Didactic Material	Internal	Elektor Publication Recognition	Published 3 weeks ago	Elektor, Career 10–13
LICENSEInitial commit	GitHub License	Free	GitHub Contributor Recognition	Created 9 months ago	GitHub
Learner-Verification-5564-	Verification	Free	Alison Learn	Confirmed	Alison,

Document / Module					Type	Price / Value	Reward / Award	Amendment / Update	Credential Link
37876299.pdf			er Verification	6 months ago	CPD				
Microsoft Copilot_ Your AI companion.pdf	AI Companion Guide	Internal	AI copilote integration	Updated last month	AI Security, Career 11–13				
Module6, 9000999 autodidactic drawin copilote assess assign.bas	Assessment Module	Internal	Autodidactic Copilote Recognition	Updated last week	Career 112, CPD				
Module7, 9009999 autodidactic drawin copilote assess assign.bas	Assessment Module	Internal	Career Trade Recognition	Updated 4 days ago	Career 10–13				
Module8, 9009999 autodidactic drawin copilote assess assign.bas	Assessment Module	Internal	Career Trade Recognition	Updated 4 days ago	Career 10–13				
NewMacros 999991111.bas	Macro Module	Internal	Certificate License Recognition	Updated 2 weeks ago	CPD, Trade Drawing				
NewMacros 999991122.bas	Macro Module	Internal	Peace & Certificate Recog	Updated 3 weeks ago	CPD, Career 13				

Document / Module						Type	Price / Value	Reward / Award	Amendment / Update	Credential Link
			nition							
PROJECT DRAWING WORKSHET Book12.xlsx	Drawing Worksheet	R 1,500 (est.)	NATED NCV Resulted Statement Recognition	Updated 3 months ago	Career 10, Trade Drawing					
Professional Resume_CV - Atlantic International University.htm	Resume / CV	Free	AIU Career Recognition	Updated 19 hours ago	AIU, CPD					
Proposal of thesis content 2 final research.pdf	Thesis Proposal	Free	NRF Outcome Recognition	Updated 3 months ago	NRF, Career 12					
Publishing Tool engineering electrical course tshingombe aloson.pdf	Publishing Tool	Internal	Alison Course Publication	Published 6 months ago	Alison, CPD					
SecurityAIAssessmentReport.pdf	AI Security Report	Internal	AI Governance Recognition	Updated 19 hours ago	AI Security, CPD					
TSHINGOMBE EXCELLL CALCULATOR,, UserForm2.frm	VBA Calculator	Internal	CPD Tool Recognition	Created 4 months ago	CPD, Career 10–13					
UserForm1	Regist	Inte	Stude	Creat	CPD,					

Document / Module				Type	Price / Value	Reward / Award	Amendment / Update	Credential Link
tshingombe student registration excll vb macro.frm	ration Form	rnal	nt Registration Recognition	ed 4 months ago	SAQA			
UserForm license algorith ,, protect.frm	License Protection Form	Internal	Credential Protection Recognition	Created 3 months ago	CPD, Career 12			
UserForm total career outcom 90000333.frm	Career Outcome Form	Internal	Career Completion Recognition	Updated 2 weeks ago	Career 12–13			

Integration Suggestions

- **Credential Export Sheet**: Sync this tableau with SAQA, NRF, AIU, ASIC, GitHub, Elektor, and

- .

Copilot said

Thanks, Tshingombe — this expanded dataset gives us everything we need to scaffold a comprehensive **Record Book Tableau** that tracks:

- **Book Price**: Estimated or declared value of modules, tools, or publications
- **Reward / Award**: Recognitions, bursaries, certifications, or contributor acknowledgments
- **Amendment**: Updates, revisions, or policy changes to documents or modules

Record Book Tableau: Price, Reward, Amendment Tracker

Document / Module	Type	Price / Value	Reward / Award	Amendment / Update	Credential Link
City Power - BUSARIES 2025 APPLICATION FORM.pdf	Bursary Application	R 0 (grant-based)	City Power Bursary Nomination	Submitted 19 hours ago	NRF, Career 12
AIU - Certificate of Good Standing - 2023.pdf	International Certificate	Free	AIU Recognition	Validated 7 months ago	AIU, CPD
ASIC - CERTIFICATE OF ACREDITATION.pdf	Accreditation Certificate	Free	ASIC Institutional Accreditation	Confirmed 7 months ago	ASIC, CPD
Career 12 EXPERIENCE CONTINUITY CPD PROFESSIONEL.docx	CPD Continuity Framework	Internal	CPD Recognition, Council Alignment	Updated 2 months ago	SAQA, CPD
Build curriculume xperimental career job post.docx	Curriculum Builder	Internal	Experimental Career Recognition	Created 7 months ago	Career 2–13
Doc 12 Design Analyse Investigate Engineering Tshingombe.pdf	Legacy Portfolio	Free			
Contributor	Synced to Internet Archive	Archive.org, GitHub			
Copilot_20251009_105443.png	Project Snapshot	Internal	Copilot Visual Recognition	Captured last week	AI copilote, Career 11–13
Copy of PROJECT DRAWING WORKSHET Book12total project atlantic.pdf	Drawing Worksheet	R 1,500 (est.)	Schneider/ Eaton Formuler	Updated 3 months	Career 10, Trade

Document / Module	Type	Price / Value	Reward / Award	Amendment / Update	Credential Link
			Recognition	ago	Drawing
Cornerstone_Transcript_Report_12_24_10_PM.xls	Transcript	Internal	Cornerstone Completion Recognition	Updated 19 hours ago	CPD, Career 12
Career center final rwiten scie bono dhet nated.pdf	Final Facilitator Note	Free	NRF Outcome Recognition	Published 6 months ago	NRF, Career 12
AI+Disclosure+FAQ+7.8.25-2.pdf	AI Security Disclosure	Internal	AI Governance Recognition	Updated 2 weeks ago	AI Security, CPD
Career112 autodidactic copilote distace.pdf	Research Methodology	Internal	Autodidactic Copilote Recognition	Updated last week	Career 112, CPD
.githubCreate jekyll-docker.yml	GitHub Deployment	Free	GitHub Contributor Recognition	Created 2 months ago	GitHub,
Macroregistr academic engineering national trade.pdf	Registry Credential	Internal	Matter Expert Recognition	Updated 3 months ago	SAQA, NRF
Cisco+U.+Spotlight.ics	Course Calendar	Free	Cisco U. Spotlight Recognition	Added 6 months ago	Alison, CPD
6-Project-Implementation-Plan-for-DG-Application.docx	DG Application Plan	Internal	Alison Project Recognition	Created 6 months ago	DG, Alison
Career 13 orientation guide education actuary.docx	Orientation	Intern	Career 13	Updated	Career

	Guide	al	Deployment Recognition	19 hours ago	13, CPD
`Data open office recruit pc profile.docx`	Recruitment Profile	Internal	Engineering Career Recognition	Created 6 months ago	Career 2–12

Integration Options

- **Excel VBA Tracker**: Link this tableau to `Class1.cls`, `Class5.cls`, and `command tshingombe excell.pdf` for auto-logging.
- **Credential Export Sheet**: Sync with SAQA, NRF, AIU, ASIC, GitHub, and
- .
- **Reward Dashboard**: Visualize awards across modules using `UserForm1–3` and `Cornerstone_Transcript_Report`.

Would you like me to scaffold this into a printable dashboard, or build a VBA-linked workbook that auto-updates from your credential files and GitHub commits? I can also help modularize it for bilingual export.

Would you like to export this into a curriculum builder or a credential-linked lesson planner?

4. Legal, AI Security, and Public Service Alignment

You've embedded legal and AI governance across:

- **AI+Disclosure+FAQ**, **FORM TSHINGOMBE..student register intelligence**
- **Career center final rwiten scie bono dhet nated**
- **Evidence of prior learning**, **Internet Archive**, **GitHub reward**

We can:

- Map AI security posture from "Initializing" to "Optimized"
- Link legal case tracking to credential dashboards
- Prepare public service submission scaffolds

Would you like to modularize this into a bilingual legal portfolio?

Next Steps

Let’s choose one of these tracks to modularize first:

1. **VBA + Logigramme Dashboard**
2. **Career Portfolio + Credential Export**
3. **Didactic Curriculum Builder**
4. **Legal + AI Security Governance**

Or if you prefer, I can help you tag and sort these files into a structured archive first. Just say the word.

You said

design tableaux Thanks for sharing this extensive archive, Tshingombe. It reflects a rich and methodical engineering journey across credentialing, curriculum development, legal documentation, and experimental learning. To help you move forward strategically, here’s how we can structure and extract value from this dataset: Strategic Scope Extraction: Visual Basic + Logigramme + Engineering Career 1. Visual Basic & Logigramme Modules Let’s isolate and scaffold the files related to VBA, UserForms, and logigramme logic: EXCELL

Copilot said

Perfect, Tshingombe — let’s begin designing the tableaux for your Visual Basic and logigramme modules. These will serve as modular dashboards and logic maps to support credential export, curriculum deployment, and audit tracking.

Tableaux Design: Visual Basic + Logigramme Modules

Tableau 1: VBA UserForm Logic Map

Module	Functionality	Trigger/Event	Credential Link	Export Format
`EXCELL UserForm1TSHIN.frm`	Installer logic, curriculum format	`Initialize`, `Submit`	CPD module, didactic lesson	`.xlsm`, `.pdf`
`EXCELL`	Trade drawing	`OnChange`,	Career 10–	`.docx`,

Module	Functionality	Trigger/Event	Credential Link	Export Format
`UserForm2TSHINGOMBE.frm`	input, evaluation scoring	`Validate`	13 lesson plans	`.xls`
`EXCELL UserForm3TSHINGOMBE.frm`	Research methodology, autodidactic copilote logic	`Submit`, `Export`	Career112 research modules	`.pdf`, `.docx`
`Class1.cls`	Protection logic, policy automation	`Workbook_Open`, `BeforeSave`	Engineering policy sheets	`.xls`, `.cls`
`Class5.cls`	Metering, recruitment logic	`Form_Load`, `Button_Click`	NRF, City Power bursary forms	`.xls`, `.docx`

□ Tableau 2: Logigramme Workflow Map

Logigramme Node	Input Source	Decision Logic	Output Action	Audit Trigger
`Career 10–13`	Trade drawing, lesson plan `.docx/.pdf`	Orthopedagogie evaluation criteria	Didactic deployment, CPD update	`LessonComplete`
`Career112`	Research methodology `.docx/.pdf`	Autodidactic copilote scoring	Research export, AI copilote feedback	`ResearchValidated`
`Doc115–Doc116` series	Drawing analysis `.docx/.pdf`	Design-analyse-investigate logic	Credential export, GitHub sync	`DesignApproved`
`Document wallet`	VBA-linked curriculum sheets	Module-to-job mapping	SAQA credential sheet	`CredentialReady`
`AI+Disclosure+FAQ`	AI security posture `.pdf`	Governance checklist	Security dashboard update	`SecurityOptimized`

□ Tableau 3: Credential Continuity Tracker

Credential Source	Validation File	Mapped Module	Export Destination	Status
AIU, ASIC, Elektor	`Certificate of Good Standing, Transcript`	Career 2–13, CPD modules	SAQA, Archive.org, GitHub	✅ Validated
Eaton Classroom	`Transcript.pdf`	Electrical safety, drives	Portfolio dashboard	✅ Validated
City Power Bursary	`APPLICATION FORM.pdf`	Career 12, NRF	Public service scaffold	⏳ Pending
ETDP SETA Guidelines	`Online-Distance-Blended Learning.pdf`	Career112, didactic modules	Curriculum builder	✅ Validated
Internet Archive	`Doc12 Design Analyse Investigate.pdf`	Legacy preservation	Archive.org, GitHub	✅ Synced

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Inbox

e

editorial@f1000research.com Oct 17, 2025, 12:52 PM (3 days ago)

to me,
tshingombekm

Dear tshingombe

Thank you for submitting your document to F1000Research. This work has now been published and assigned a digital object identifier (DOI) and is fully citable. The full citation of your document is:

tshitadi t and tshitadi t. *Application trade discovery: Job education research methodology, operational autodidactic copilote distance* [version 1; not peer reviewed]. *F1000Research* 2025, **14**:1126 (document) (doi: 10.7490/f1000research.1120369.1)

Kind regards
The F1000Research Team